EXHIBIT 2

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No.	Asthana 10-17-10-4 (LCNT/127809)			
First Inventor	Asthana			
Title	Method and Apparatus for Improving Wireless Network Reliability			
Express Mail Label No.	EV566252309US			

APPLICATION ELEMENTS				Commissioner for Patents					
l	00 concerning utility patent application	ADDRESS TO: P.O. Box 1450 Alexandria VA 22313-1450							
	nittal Form (e.g., PTO/SB/17) original and a duplicate for fee proces	ACCOMPANYING APPLICATIONS PARTS							
2. 🔲 Applicant c	laims small entity status.	9. 🛛	Assignment Papers (cover sheet & document(s)) Name of Assignee Lucent Technologies, Inc.						
See 37 CF 3. Specification		es <u>25</u>]		Name of A	logies, Inc.	<u> </u>			
Both the clair	ms and abstract must start on a new per on the preferred arrangement, see MPEP					U.S 477			
4. X Formal Dra	wing(s) (35 U.S.C.113)[Total Si	heets 9]	10. 🗆		. ` · ·	ower of Attorney	11/35		
5. Oath or Declara a. Newly	ation [Total Shee executed (original or copy)	ets <u>4</u>]	11. 🔲	English Translation Document (if applicable)					
`	rom a prior application (37 CFR	1.63 (d))	12. 🗌	12. Information Disclosure Statement (PTO/SB/0					
(for a continuation/divisional with Box 18 completed)				Copies of foreign patent documents,					
	ETION OF INVENTOR(S) statement attached deleting inventor	·(s)		publi	publications & other information				
named	in the prior application, see 37 CFR (2) and 1.33(b).	(-)	13.	Preliminary	/ Amendment				
6. Applicatio	n Data Sheet. See 37 CFR 1.76	3	14. 🛛		eipt Postcard (MPEP 503 specifically itemized)	3)			
	CD-R in duplicate, large table o	r	15. 🗆	-					
Computer Program (Appendix) Landscape Table on CD				Certified Copy of Priority Document(s) (if foreign priority is claimed)					
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, items ac. are required)			16. 🔲	16. Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.					
a. Computer Readable Form (CRF)			İ						
i. ☐ Computer Readable Form (CRF) ii. ☐ Transfer Request (37 CFR 1.821(e))				17. Other:					
	Sequence Listing on:								
i. CD-ROM or CD-R (2 copies); or ii. Paper									
`	ts verifying identity of above copi	es							
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the									
specification followin ☐ Continuation	ng the title, or in an Application Dat ☐ Divisional ☐ Co				- application No.				
Prior application i		ntinuation-in-part	(CIF)	Art Un	r application No:// it:	_			
		19. CORRESPO	ONDENCE	ADDRESS					
☐ The address associated with Customer Number ☐ The address associated with Customer Number ☐ Green Correspondence address below									
Name									
Address									
City	State			Zip Code					
Country	Telephone 7			1	Email address				
Signature	6/Mall		- -	Date	2/15/06				
Name (Print/Type)	Eamon J. Wall		. <u></u>		Registration No. (Attorney/Agent) 39,4	100			

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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	<u> </u>			1				
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).				Complete if Known				
FEE TRANSMITTAL			Application Number	Not Yet Assigned				
			Filing Date	Herewith				
for FY 2006			First Named Inventor	Asthana				
Applicant claims	small entity st	tatus. See 37 C	FR 1.27	Examiner Name	Not Yet Assigned			
TOTAL AMOUNT OF	DAVISTALT	(\$) 1490		Art Unit	Not Yet Assigned			
TOTAL AWOUNT OF	PATIVIENT	(Φ) 1490		Attorney Docket No.	Asthana 10-17-10)-4 (LCNT/12780	9)	
METHOD OF PAYM	IENT (check	all that apply)						
☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): ☑ Deposit Account Deposit Account Number: 20-0782 Deposit Account Name: Patterson & Sheridan, LLP								
For the abov	e-identified de	posit account, the	e Director is	hereby authorized to:	(check all that ap	oply)		
Charg	je fee(s) indica	ated below		Cha	rge fee(s) indicate	ed below, exce	pt for the filing fee	
	r 37 CFR 1.16			. ,	dit any overpayme		credit card	
information and authoriz								
FEE CALCULATION	٧							
1. BASIC FILING,		FEES	SE	ARCH FEES		ATION FEES		
Application Type	5 E00 (\$	Small Entity	•	Small Enti		Small Entity		
Utility	<u>Fee (\$</u> 300) <u>Fee(\$)</u> 150	<u>re</u> :	e(\$) <u>Fee(\$)</u> 250	<u>Fee(\$)</u> 200	Fee(\$) 100	Fees Paid (\$) 1000	
Design	200	100	100		130	65	<u>1000</u>	
Plant	200	100	300		160	80	•	
Reissue	300	150	500 500		600			
Provisional	200	100	300		0	300 0		
2. EXCESS CLAIM		100	`	, ,	0	U	Small Entity	
	FEES				•	E00 (\$)	Small Entity	
<u>Fee Description</u> Each claim over 20 (including Reissues)						<u>Fee (\$)</u> 50	<u>Fee (\$)</u> 25	
Each independen			eissues)			200	100	
Multiple depende	nt claims	,	,			360	180	
Total Claims						Multiple	Dependent Claims	
<u>21</u> -20 or	HP= <u>1</u>	x	<u>50</u> =	<u>50</u>		<u>Fee (</u> \$	Fee Paid (\$)	
HP = highest number	er of total claims	paid for, if greater	than 20.					
<u>Indep. Claims</u>	<u>Extra</u>	Claims F	Fee(\$)	Fee Paid (\$)			_	
<u>5</u> -3 or I	·· <u>-</u>		<u> 200</u> =	<u>400</u>				
HP = highest number	· ·	nt claims paid for, if	greater than 3		•			
3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50								
<u>Total Shee</u>	<u>ts Extra S</u>	<u>Sheets</u> <u>Nur</u>	nber of eac	G) and 37 CFR 1.1 th additional 50 or	fraction there	of Fee (\$)	Fee Paid (\$)	
100 = / 50 = (round up to a whole number) x =								
4. OTHER FEE(S) Non-English Specification, \$130 fee (no small entity discount)								
Other (e.g., late filing surcharge): Assignment Recordation 40								
Onter (e.g.,	ate ming su	ionaryej. Assi	gament Recor	uandi				
SUBMITTED BY								
	0	11/6/11	-	Registration No.				
Signature	69	Wall		(Attorney/Agent)	39,414	Telepho	ne 732 530-9404	

Name (Print/Type) Eamon J. Wall Date 2/15/06

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

What is claimed is:

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1	1.	Α	method,	com	prising	the	steps	of:
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- detecting a failure condition on a first base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and
- in response to detection of the failure condition, triggering a second base station element to attempt to reconfigure itself to be better able to serve at least a portion of the plurality of wireless terminals previously served by the first base station element than the second base station was able to prior to the occurrence of the failure condition.
- 1 2. The method of claim 1, wherein triggering the second base station element to attempt to reconfigure itself comprises the step of:
 - determining a reconfiguration solution that when implemented will reconfigure the second base station element to be better able to serve at least a portion of the plurality of wireless terminals previously served by the first base station element than the second base station was able to prior to the occurrence of the failure condition.
 - 3. The method of claim 1, further comprising the step of:
 - reconfiguring the second base station element according to a reconfiguration solution that when implemented will reconfigure the second base station element to be better able to serve at least a portion of the plurality of wireless terminals previously served by the first base station element than the second base station was able to prior to the occurrence of the failure condition.
- 1 4. The method of claim 3, wherein reconfiguring the second base station element 2 comprises the step of:
- increasing a power level employed by the second base station element for expanding a wireless coverage area of the second base station element.
- 1 5. The method of claim 3, wherein reconfiguring the second base station element
- 2 comprises the steps of:

- 3 monitoring each of the plurality of wireless terminals for determining a
- 4 direction of travel associated with each of the plurality of wireless terminals; and
- 5 establishing a connection with each of the plurality of wireless terminals for
- 6 which the direction of travel is toward the second base station element.
- 1 6. The method of claim 1, wherein the failure condition is detected by the second
- 2 base station element.
- 1 7. The method of claim 1, wherein the failure condition is detected by the first
- 2 base station element.
- 1 8. The method of claim 7, further comprising the step of:
- 2 in response to detecting the failure condition, generating a failure indication
- 3 message adapted to trigger the second base station element to attempt to reconfigure
- 4 itself to be better able to serve at least a portion of the plurality of wireless terminals
- 5 previously served by the first base station element than the second base station was
- 6 able to prior to the occurrence of the failure condition; and
- 7 transmitting the failure indication message toward at least one of the second
- 8 base station element and a base station controller.
- 1 9. The method of claim 8, wherein the failure condition is associated with a
- 2 wireless communication portion of the first base station element, wherein the failure
- 3 indication message is generated for transmission by a wireline portion of the first base
- 4 station element.
- 1 10. The method of claim 8, wherein the failure condition is associated with a
- 2 wireline communication portion of the first base station element, wherein the failure
- 3 indication message is generated for transmission by a wireless portion of the first base
- 4 station element.

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11. An apparatus, comprising:

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2	means for detecting a failure condition on a first base station element that was
3	serving a plurality of wireless terminals prior to occurrence of the failure condition;
4	and

- means for, in response to detection of the failure condition, triggering a second base station element to attempt to reconfigure itself to be better able to serve at least a portion of the plurality of wireless terminals previously served by the first base station element than the second base station was able to prior to the occurrence of the failure condition.
- 1 12. The apparatus of claim 11, wherein the means for triggering the second base 2 station element to attempt to reconfigure itself comprises:
 - means for determining a reconfiguration solution that when implemented will reconfigure the second base station element to be better able to serve at least a portion of the plurality of wireless terminals previously served by the first base station element than the second base station was able to prior to the occurrence of the failure condition.
 - 13. The apparatus of claim 11, further comprising:
 - means for reconfiguring the second base station element according to a reconfiguration solution that when implemented will reconfigure the second base station element to be better able to serve at least a portion of the plurality of wireless terminals previously served by the first base station element than the second base station was able to prior to the occurrence of the failure condition.
 - 14. The apparatus of claim 13, wherein the means for reconfiguring the second base station element comprises:
- means for increasing a power level employed by the second base station element for expanding a wireless coverage area of the second base station element.
- 1 15. The apparatus of claim 13, wherein the means for reconfiguring the second

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2 base station element comprises:

- means for monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals; and
- 6 means for establishing a connection with each of the plurality of wireless 7 terminals for which the direction of travel is toward the second base station element.
- 1 16. The apparatus of claim 11, wherein the failure condition is detected by the first
- 2 base station element.

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- 17. The apparatus of claim 16, further comprising:
- 2 means for, in response to detecting the failure condition, generating a failure
- 3 indication message adapted to trigger the second base station element to attempt to
- 4 reconfigure itself to be better able to serve at least a portion of the plurality of wireless
- 5 terminals previously served by the first base station element than the second base
- 6 station was able to prior to the occurrence of the failure condition; and
- 7 means for transmitting the failure indication message toward at least one of the
- 8 second base station element and a base station controller.
- 1 18. The apparatus of claim 17, wherein the failure condition is associated with a
- 2 wireless communication portion of the first base station element, wherein the means
- 3 for generating the failure indication message comprises a wireline portion of the first
- 4 base station element.
 - 19. A method, comprising the steps of:
- detecting, at a first base station element, a failure condition on a second base
- 3 station element that was serving a plurality of wireless terminals prior to occurrence
- 4 of the failure condition; and
- 5 in response to detection of the occurrence of the failure condition on the
- 6 second base station element, the first base station element attempting to reconfigure
- 7 itself to be better able to serve at least a portion of the plurality of wireless terminals
- 8 previously served by the second base station element than the first base station was

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9 able to prior to the occurrence of the failure condition.

20. An apparatus, comprising:

a input-output module for detecting, at a first base station element, an occurrence of a failure condition on a second base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

a controller coupled to the receiver, the controller adapted to respond to the occurrence of the failure condition on the second base station element by triggering the first base station element to attempt to reconfigure itself to be better able to serve at least a portion of the plurality of wireless terminals previously served by the second base station element than the first base station was able to prior to the occurrence of the failure condition.

21. An apparatus, comprising:

means for detecting an occurrence of a failure condition on a first base station element that was serving a plurality of wireless terminals prior to the occurrence of the failure condition;

means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution depends on a geographical location of the first base station element and at least one geographical location associated with the respective at least one other base station element; and

means for implementing the reconfiguration solution for reconfiguring the at least one other base station element to attempt to serve the at least a portion of the plurality of wireless terminals previously served by the first base station element.

412980_1.DOC **24**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s):

Asthana et al.

Case:

Asthana 10-17-10-4 (LCNT/127809)

Serial No.:

11/354,709

Group Art Unit:

2617

Filed:

02/15/2006

Confirmation #:

1276

Examiner:

Ajibade Akonai, Olumide

Title:

METHOD AND APPARATUS FOR IMPROVING WIRELESS

NETWORK RELIABILITY

MAIL STOP AMENDMENT COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

SIR:

RESPONSE AMENDMENT

In response to the non-final Office Action mailed June 12, 2008, please reconsider the above-identified patent application as follows.

In the event that an extension of time is required for this response to be considered timely, and a petition therefor does not otherwise accompany this response, any necessary extension of time is hereby petitioned for.

Applicants do not believe that any fees are due in connection with this response. In the event that Applicants are incorrect, the Commissioner is authorized to charge any fees due, including extension of time and excess claim fees, to counsel's Deposit Account No. 20-0782/LCNT/127809.

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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- 1 1. (currently amended) A method, comprising the steps of:
- detecting a failure condition on a first base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and
- 4 <u>in response to detection of upon detecting</u> the failure condition, triggering a
- 5 second base station element to attempt to reconfigure itself self-reconfigure according to
- 6 <u>a reconfiguration solution allowing the second base station element</u> to [[be]] better able to
- 7 serve at least a portion of the plurality of wireless terminals previously served by the first
- 8 base station element than the second base station element was able to prior to the
- 9 occurrence of the failure condition, wherein the reconfiguration solution depends on a
- 10 type of the failure condition.
- 2. (currently amended) The method of claim 1, wherein triggering the second base station element to attempt to reconfigure itself comprises the step of further comprising:
- determining [[a]] the reconfiguration solution that when implemented will
- 4 reconfigure the second base station element to be better able to serve at least a portion of
- 5 the plurality of wireless terminals previously served by the first base station element than
- 6 the second base station was able to prior to the occurrence of the failure condition.
- 1 3. (currently amended) The method of claim 1, further comprising the step-of:
- 2 reconfiguring the second base station element according to a reconfiguration
- 3 solution that when implemented will reconfigure the second base station element to be
- 4 better able to serve at least a portion of the plurality of wireless terminals previously
- 5 served by the first base station element than the second base station was able to prior to
- 6 the occurrence of the failure condition wherein the reconfiguration solution is pre-
- 7 determined.

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- 1 4. (currently amended) The method of claim [[3]] 1, wherein the reconfiguration
- 2 <u>solution</u> reconfiguring the second base station element comprises the step of:
- 3 increasing a power level employed by the second base station element for
- 4 expanding a wireless coverage area of the second base station element.
- 1 5. (currently amended) The method of claim [[3]] 1, wherein the reconfiguration
- 2 <u>solution reconfiguring the second base station element</u> comprises the steps of:
- 3 monitoring each of the plurality of wireless terminals for determining a direction
- 4 of travel associated with each of the plurality of wireless terminals; and
- 5 establishing a connection with each of the plurality of wireless terminals for
- 6 which the direction of travel is toward the second base station element.
- 1 6. (original) The method of claim 1, wherein the failure condition is detected by the
- 2 second base station element.
- 1 7. (original) The method of claim 1, wherein the failure condition is detected by the
- 2 first base station element.
- 1 8. (currently amended) The method of claim 7, further comprising the step of:
- 2 in response to detecting the failure condition, generating a failure indication
- 3 message adapted to trigger the second base station element to self-reconfigure attempt to
- 4 reconfigure itself to be better able to serve at least a portion of the plurality of wireless
- 5 terminals previously served by the first base station element than the second-base station
- 6 was able to prior to the occurrence of the failure condition; and
- 7 transmitting the failure indication message toward at least one of the second base
- 8 station element and a base station controller.
- 9. (original) The method of claim 8, wherein the failure condition is associated with
- 2 a wireless communication portion of the first base station element, wherein the failure
- 3 indication message is generated for transmission by a wireline portion of the first base
- 4 station element.

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- 1 10. (original) The method of claim 8, wherein the failure condition is associated with
- 2 a wireline communication portion of the first base station element, wherein the failure
- 3 indication message is generated for transmission by a wireless portion of the first base
- 4 station element.
- 1 11. (currently amended) An apparatus, comprising:
- 2 means for detecting a failure condition on a first base station element that was
- 3 serving a plurality of wireless terminals prior to occurrence of the failure condition; and
- 4 means for <u>triggering</u>, in response to detection of <u>upon detecting</u> the failure.
- 5 condition, triggering a second base station element to attempt to reconfigure itself self-
- 6 reconfigure according to a reconfiguration solution allowing the second base station
- 7 element to [[be]] better able to serve at least a portion of the plurality of wireless
- 8 terminals previously served by the first base station element than the second base station
- 9 element was able to prior to the occurrence of the failure condition, wherein the
- 10 reconfiguration solution depends on a type of the failure condition.
- 1 12. (currently amended) The apparatus of claim 11, wherein the means for triggering
- 2 the second base station element to attempt to reconfigure itself comprises:
- means for determining [[a]] the reconfiguration solution that when implemented
- 4 will reconfigure the second base station element to be better able to serve at least a
- 5 portion of the plurality of wireless terminals previously served by the first base station
- 6 element than the second base station was able to prior to the occurrence of the failure
- 7 condition.
- 1 13. (currently amended) The apparatus of claim 11, further comprising:
- 2 means for reconfiguring the second base station element according to [[a]] the
- 3 reconfiguration solution that when implemented will reconfigure the second base station
- 4 element to be better able to serve at least a portion of the plurality of wireless terminals
- 5 previously served by the first base station element than the second base station was able
- 6 to prior to the occurrence of the failure condition.

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- 1 14. (original) The apparatus of claim 13, wherein the means for reconfiguring the
- 2 second base station element comprises:
- means for increasing a power level employed by the second base station element
- 4 for expanding a wireless coverage area of the second base station element.
- 1 15. (original) The apparatus of claim 13, wherein the means for reconfiguring the
- 2 second base station element comprises:
- means for monitoring each of the plurality of wireless terminals for determining a
- 4 direction of travel associated with each of the plurality of wireless terminals; and
- 5 means for establishing a connection with each of the plurality of wireless
- 6 terminals for which the direction of travel is toward the second base station element.
- 1 16. (original) The apparatus of claim 11, wherein the failure condition is detected by
- 2 the first base station element.
- 1 17. (currently amended) The apparatus of claim 16, further comprising:
- 2 means for generating, in response to detecting the failure condition, generating a
- 3 failure indication message adapted to trigger the second base station element to self-
- 4 reconfigure attempt to reconfigure itself to be better able to serve at least a portion of the
- 5 plurality of wireless terminals previously served by the first base station element than the
- 6 second base station was able to prior to the occurrence of the failure condition; and
- 7 means for transmitting the failure indication message toward at least one of the
- 8 second base station element and a base station controller.
- 1 18. (original) The apparatus of claim 17, wherein the failure condition is associated
- 2 with a wireless communication portion of the first base station element, wherein the
- 3 means for generating the failure indication message comprises a wireline portion of the
- 4 first base station element.
- 1 19. (currently amended) A method, comprising the steps of:

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detecting, at a first base station element, a failure condition on a second base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

in response to detection of the occurrence of upon detecting the failure condition on the second base station element, attempting by the first base station element to self-reconfigure according to a reconfiguration solution allowing the first base station element, attempting to reconfigure itself to [[be]] better able to serve at least a portion of the plurality of wireless terminals previously served by the second base station element than the first base station element was able to prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition.

20. (currently amended) An apparatus, comprising:

a input-output module for detecting, at a first base station element, an occurrence of a failure condition on a second base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

a controller coupled to [[the]] <u>a</u> receiver, the controller adapted to respond to the occurrence of the failure condition on the second base station element by triggering the first base station element to attempt to reconfigure itself <u>according to a reconfiguration</u> solution to [[be]] better <u>able to</u> serve at least a portion of the plurality of wireless terminals <u>previously served by the second base station element</u> than the first base station <u>element</u> was able to prior to the <u>occurrence</u> of the failure condition, <u>wherein the</u> reconfiguration solution depends on a type of the failure condition.

21. (original) An apparatus, comprising:

means for detecting an occurrence of a failure condition on a first base station element that was serving a plurality of wireless terminals prior to the occurrence of the failure condition;

means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution depends on a geographical location of the first base station element and at least

Case 6:20-cv-01021-ADA Document 35-2 Filed 09/02/21 Page 15 of 115

Serial No. 11/354,709

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- 1 one geographical location associated with the respective at least one other base station
- 2 element; and
- means for implementing the reconfiguration solution for reconfiguring the at least
- 4 one other base station element to attempt to serve the at least a portion of the plurality of
- 5 wireless terminals previously served by the first base station element.

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Remarks

Claims 1-21 are pending in the application.

Claim 20 is rejected under 35 U.S.C. 112, ¶2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-5, 7-18, and 21are rejected under 35 U.S.C. §102(b) as being anticipated by William et al. GB 2280570 A (hereinafter, "William").

Claims 19 and 20 are rejected under 35 U.S.C. §102(b) as being anticipated by Stanwood et al. 20060264214 (hereinafter, "Stanwood").

Claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood.

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Any amendments to any claim for reasons other than as expressly recited herein as being for the purpose of distinguishing such claim from known prior art are not being made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are being made only with an intent to change the literal scope of such claim in the most minimal way, i.e., to just avoid the prior art in a way that leaves the claim novel and not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, because a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims

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has been changed. This is true whether a dependent claim has been rewritten to expressly include the limitations of those claims on which it formerly depended or whether an independent claim has been rewritten to include the limitations of claims that previously depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

Rejection Under 35 U.S.C. §112

Claim 20

Claim 20 is rejected under 35 U.S.C. §112, ¶2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejection is traversed.

Applicants have amended claim 20 to correct the antecedent basis problem. Accordingly, Applicants' believe that claim 20 is allowable under 35 U.S.C. §112, ¶2. The Examiner is respectfully requested to withdraw the rejection.

Rejection Under 35 U.S.C. §102

Claims 1-5, 7-18, and 21

Claims 1-5, 7-18, and 21 are rejected under 35 U.S.C. §102(b) as being anticipated by William. The rejection is traversed.

Anticipation requires the disclosure in a single prior art reference of each and every element of the claimed invention, arranged as in the claim. The William reference fails to disclose each and every element of the claimed invention, as arranged in independent claim 1.

More specifically, William does not teach or suggest at least:

upon detecting the failure condition, triggering a second base station element to self-reconfigure according to a reconfiguration solution allowing the second base station element to better serve at least a portion of the plurality of wireless terminals than the second base station element was able to prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition,

as recited in independent claim 1 (emphasis added).

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Rather, the cited portions of William merely disclose that upon a base station failure, the output power of adjacent sectors or cells is increased to provide service in a sector affected by the failure. This is different from self-reconfiguring a base station element according to a reconfiguration solution that depends on a type of the failure. William does not disclose that a solution to the detected failure depends on a type of the failure. Moreover, William discloses only one solution, namely increasing the output power of adjacent cells and sectors. Accordingly, William fails to teach or suggest all the elements of the claimed invention, as arranged in Applicants' independent claim 1.

Therefore, independent claim 1 is not anticipated by William and is allowable under 35 U.S.C. §102(b). Independent claim 11 recites relevant limitations similar to those recited in independent claim 1 and, as such, and at least for the same reasons as discussed above, this independent claim also is not anticipated by William and is allowable under 35 U.S.C. §102(b). Because all of the dependent claims depending from the independent claims include all the limitations of the respective independent claim from which they ultimately depend, each such dependent claim is also allowable over William. Therefore, Applicants' claims 2-5, 7-10, and 12-18 are also allowable over William under 35 U.S.C. §102.

With respect to claim 21, William does not teach or suggest at least:

means for determining a reconfiguration solution ... wherein the reconfiguration solution <u>depends on a geographical location of the first base station element and at least one geographical location associated with the respective at least one other base station element,</u>

as recited in independent claim 21 (emphasis added). The Examiner indicates that the above recited element is disclosed at page 6, lines 17-31 and page 7, lines 24-33 of William (see Office Action, page 6). Applicants respectfully disagree.

The first cited portion, i.e., page 6, lines 17-31, describes how an RCU or base station failure is detected and indicated. More specifically, the cited portion describes that a base station failure may be detected by measuring the base station's own transmit power; by measuring receive level or receive quality of an adjacent base station; or by using a mobile device to measure receive level or receive quality from the base station and reporting the results to the base station. However, this portion does not even mention how to respond to the detected failure.

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The second cited portion, i.e., page 7, lines 24-33, summarizes the William arrangement. It states in part the following:

"the OMC can take action in order to provide communication coverage to the cell affected by the failure. More specifically, the output power of adjacent sectors or cells can be increased to provide a service to those mobiles located within a sector affected by the failure, i.e., transmitters in either adjacent sectors or cells can extend their coverage range beyond their normal boundaries in order to provide service to mobile communications devices lying outside their defined coverage cells."

In other words, the cited portion discusses only one solution to the detected failure, namely increasing the output power of adjacent sectors or cells. However, that solution does not depend on a geographical location of one base station and a geographical location associated with a respective other base station. No matter where the base station having a failure is located, the output power is increased on the adjacent sectors or cells. Thus, William fails to teach or suggest all the elements of the claimed invention, as arranged in Applicants' independent claim 21. Accordingly, independent claim 21 is also not anticipated by William and is allowable under 35 U.S.C. §102(b).

Therefore, Applicants' claims 1-5, 7-18, and 21 are allowable over William under 35 U.S.C. §102. The Examiner is respectfully requested to withdraw the rejection.

Claims 19 and 20

Claims 19 and 20 are rejected under 35 U.S.C. §102(b) as being anticipated by Stanwood (see Office Action, page 6). The rejection is traversed.

35 U.S.C. §102(b) provides that a person shall be entitled to a patent unless "the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States" (emphasis added). Applicants' present application has been filed on February 15, 2006. Stanwood is a currently pending application that was published on November 2006, filed on May 18, 2006, and claims priority to a provisional application filed on May 20, 2005. Neither of these dates is more than a year before February 15, 2006. Accordingly, the rejection of Applicants' claims 19 and 20 under 35 U.S.C. §102(b) is improper.

Furthermore, Stanwood does not teach or suggest at least:

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upon detecting the failure condition on the second base station element, attempting by the first base station to self-reconfigure element, according to a reconfiguration solution allowing the first base station element, to better serve at least a portion of the plurality of wireless terminals than the first base station element was able to prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition,

as recited in independent claim 19. Accordingly, independent claim 19 is not anticipated by Stanwood and is allowable under 35 U.S.C. §102. Independent claim 20 recites limitations similar to those recited in independent claim 19 and, as such, and at least for the same reason as discussed above, this independent claim also is not anticipated by Stanwood and is allowable under 35 U.S.C. §102.

The Examiner is respectfully requested to withdraw the rejection.

Rejection Under 35 U.S.C. §103

Claim 6

Claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood. The rejection is traversed.

This ground of rejection applies only to a dependent claim and is predicated on the validity of the rejection under 35 U.S.C. §102 given William. Because the rejection under 35 U.S.C. §102 given William has been overcome, as described hereinabove, and there is no argument put forth by the Office Action that the Stanwood supplies that which is missing from William to render the independent claims anticipated, this ground of rejection cannot be maintained.

Therefore, Applicants' claim 6 is allowable under 35 U.S.C. §103(a) over William in view of Stanwood. The Examiner is respectfully requested to withdraw the rejection.

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Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

If, however, the Examiner still believes that there are unresolved issues, the Examiner is invited to call Eamon Wall at (732) 530-9404 so that arrangements may be made to discuss and resolve any such issues.

Respectfully submitted,

Dated: 8/28/08

Michael S. Bentley Registration No. 52,613 Agent for Applicant

PATTERSON & SHERIDAN, LLP 595 Shrewsbury Avenue, Suite 100 Shrewsbury, New Jersey 07702 Telephone: 732-530-9404

Facsimile: 732-530-9808

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s):

Asthana et al.

Case:

Asthana 10-17-10-4 (ALU/127809)

Serial No.:

11/354,709

Group Art Unit:

2617

Filed:

02/15/2006

Confirmation #:

1276

Examiner:

Ajibade Akonai, Olumide

Title:

METHOD AND APPARATUS FOR IMPROVING WIRELESS

NETWORK RELIABILITY

MAIL STOP AMENDMENT COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

SIR:

RESPONSE AMENDMENT

In response to the non-final Office Action mailed December 12, 2008, please reconsider the above-identified patent application as follows.

In the event that an extension of time is required for this response to be considered timely, and a petition therefor does not otherwise accompany this response, any necessary extension of time is hereby petitioned for.

Applicants do not believe that any fees are due in connection with this response. In the event that Applicants are incorrect, the Commissioner is authorized to charge any fees due, including extension of time (\$130) and excess claim fees, to counsel's Deposit Account No. 50-4802/ALU /127809.

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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- 1 1. (currently amended) A method, comprising the steps of:
- detecting a failure condition on a first base station element, wherein the first base
- 3 station element [[that]] was serving a plurality of wireless terminals prior to the
- 4 occurrence of the failure condition; and
- 5 upon detecting the failure condition, triggering a second base station element to
- 6 self-reconfigure according to a reconfiguration solution allowing the second base station
- 7 element to better serve adapted to reconfigure the second base station element to serve at
- 8 least a portion of the plurality of wireless terminals served by the first base station
- 9 <u>element than the second base station element was able to prior to the occurrence of the</u>
- 10 failure condition, wherein the reconfiguration solution depends on a type of the failure
- 11 condition, wherein, to provide continuity of the service to the portion of the plurality of
- 12 wireless terminals, the second base station element, upon completion of the self-
- 13 reconfiguring, initiates respective signaling to establish communication with each
- wireless terminal in the portion of the plurality of wireless terminals.
 - 1 2. (currently amended) The method of claim 1, further comprising:
- 2 determining of the reconfiguration solution upon determining that the failure
- 3 condition has been cleared on the first base station element, restoring an original
- 4 <u>configuration of the second base station</u> element.
- 1 3. (currently amended) The method of claim 1, wherein the reconfiguration solution
- 2 is pre-determined prior to the occurrence of the failure condition.
- 1 4. (previously presented) The method of claim 1, wherein the reconfiguration
- 2 solution comprises:

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- 3 increasing a power level employed by the second base station element for
- 4 expanding a wireless coverage area of the second base station element.
- 1 5. (currently amended) The method of claim 1, wherein the reconfiguration solution
- 2 comprises:
- 3 monitoring each of the plurality of wireless terminals for determining a direction
- 4 of travel associated with each of the plurality of wireless terminals; and
- 5 establishing a connection with each of the plurality of wireless terminals for
- 6 which the direction of travel is toward the second base station element by initiating
- 7 respective signaling at the second base station element.
- 1 6. (original) The method of claim 1, wherein the failure condition is detected by the
- 2 second base station element.
- 1 7. (original) The method of claim 1, wherein the failure condition is detected by the
- 2 first base station element.
- 1 8. (previously presented) The method of claim 7, further comprising the step of:
- 2 in response to detecting the failure condition, generating a failure indication
- 3 message adapted to trigger the second base station element to self-reconfigure; and
- 4 transmitting the failure indication message toward at least one of the second base
- 5 station element and a base station controller.
- 1 9. (currently amended) The method of claim 8, wherein if the failure condition is
- 2 associated with a wireless communication portion of the first base station element,
- 3 wherein the failure indication message is generated for transmission by a wireline portion
- 4 of the first base station element.
- 1 10. (currently amended) The method of claim 8, wherein if the failure condition is
- 2 associated with a wireline communication portion of the first base station element,

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- 3 wherein the failure indication message is generated for transmission by a wireless portion
- 4 of the first base station element.
- 1 11. (currently amended) An apparatus, comprising:
- 2 means for detecting a failure condition on a first base station element, wherein the
- 3 first base station element [[that]] was serving a plurality of wireless terminals prior to
- 4 occurrence of the failure condition; and
- 5 means for triggering, upon detecting the failure condition, a second base station
- 6 element to self-reconfigure according to a reconfiguration solution allowing the second
- 7 base station element to better serve adapted to reconfigure the second base station
- 8 <u>element to serve at least a portion of the plurality of wireless terminals served by the first</u>
- 9 <u>base</u> station element than the second base station element was able to prior to the
- 10 occurrence of the failure condition, wherein, to provide continuity of the service to the
- portion of the plurality of wireless terminals, the second base station element, upon
- 12 completion of the self-reconfiguring, initiates respective signaling to establish
- communication with each wireless terminal of the portion of the plurality of wireless
- 14 <u>terminals</u> the reconfiguration solution depends on a type of the failure condition.
 - 1 12. (previously presented) The apparatus of claim 11, wherein the means for
- 2 triggering comprises:
- 3 means for determining the reconfiguration solution.
- 1 13. (previously presented) The apparatus of claim 11, further comprising:
- 2 means for reconfiguring the second base station element according to the
- 3 reconfiguration solution.
- 1 14. (original) The apparatus of claim 13, wherein the means for reconfiguring the
- 2 second base station element comprises:
- means for increasing a power level employed by the second base station element
- 4 for expanding a wireless coverage area of the second base station element.

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- 1 15. (original) The apparatus of claim 13, wherein the means for reconfiguring the second base station element comprises:
- means for monitoring each of the plurality of wireless terminals for determining a
- 4 direction of travel associated with each of the plurality of wireless terminals; and
- 5 means for establishing a connection with each of the plurality of wireless
- 6 terminals for which the direction of travel is toward the second base station element.
- 1 16. (original) The apparatus of claim 11, wherein the failure condition is detected by
- 2 the first base station element.
- 1 17. (previously presented) The apparatus of claim 16, further comprising:
- 2 means for generating, in response to detecting the failure condition, a failure
- 3 indication message adapted to trigger the second base station element to self-reconfigure;
- 4 and

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- 5 means for transmitting the failure indication message toward at least one of the
- 6 second base station element and a base station controller.
- 1 18. (currently amended) The apparatus of claim 17, wherein if the failure condition is
- 2 associated with a wireless communication portion of the first base station element,
- 3 wherein the means for generating the failure indication message is generated via
- 4 comprises a wireline portion of the first base station element.
 - 19. (currently amended) A method, comprising the steps of:
- detecting, at a first base station element, that a failure condition occurred on a
- 3 second base station element, wherein the second base station element [[that]] was serving
- 4 a plurality of wireless terminals prior to occurrence of the failure condition; and
- 5 reconfiguring, upon detecting the occurrence of the failure condition on the
- 6 second base station element, the first base station element attempting by the first base
- 7 station element to self-reconfigure according to a reconfiguration solution allowing the
- 8 first base station element, to better serve at least a portion of the plurality of wireless
- 9 terminals than the first base station element was able to prior to the occurrence of the

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- 10 failure condition, wherein the reconfiguration solution determined based depends on at
- 11 <u>least</u> a type of the failure condition, the reconfiguration solution adapted to reconfigure
- 12 the first base station element to serve at least one of the plurality of wireless terminals
- previously served by the second base station element.
- 1 20. (currently amended) An apparatus, comprising:
- a input-output module for detecting, at a first base station element, an occurrence
- 3 of a failure condition on a second base station element that was serving a plurality of
- 4 wireless terminals prior to occurrence of the failure condition; and
- a controller coupled to a receiver, the controller adapted to respond to the
- 6 occurrence of the failure condition on the second base station element by triggering the
- 7 first base station element to attempt to reconfigure itself according to a reconfiguration
- 8 solution to better serve at least a portion of the plurality of wireless terminals served by
- 9 the second base station element than the first base station element was able to prior to the
- occurrence of the failure condition, wherein the reconfiguration solution is selected from
- 11 a plurality of pre-determined reconfiguration solutions associated with the first base
- 12 <u>station element-depends on a type of the failure condition</u>.
 - 21. (currently amended) An apparatus, comprising:
- 2 means for detecting an occurrence of a failure condition on a first base station
- 3 element that was serving a plurality of wireless terminals prior to the occurrence of the
- 4 failure condition;

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- 5 means for determining a reconfiguration solution adapted to reconfigure at least
- 6 one other base station element for serving at least a portion of the plurality of wireless
- 7 terminals previously served by the first base station element, wherein the reconfiguration
- 8 solution is based at least in part depends on a geographical location of the first base
- 9 station element and at least one a geographical location associated with of the respective
- at least one other base station element; and
- means for implementing the reconfiguration solution for reconfiguring the at least
- one other base station element to attempt to serve the at least a portion of the plurality of
- wireless terminals previously served by the first base station element, wherein the at least

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- 1 one other base station element is configured to initiate and establish, after being
- 2 reconfigured, communications with wireless terminals in the at least a portion of the
- 3 plurality of wireless terminals for providing continuity of the service to the wireless
- 4 terminals previously provided by the first base station element to the wireless terminals.

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Remarks

Claims 1-21 are pending in the application.

Claims 1 - 5, 7 - 18, and 21 are rejected under 35 U.S.C. §102(b) as being anticipated by William et al., GB 2280570 A (hereinafter, "William").

Claims 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood et al., U.S. Publication No. 2006/0264214 (hereinafter, "Stanwood").

Claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood.

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Applicants amended claims 1-3, 5, 9-11, and 18-21. All amendments are fully supported by the originally filed specification. The Examiner is respectfully requested to enter the amendments.

Any amendments to any claim for reasons other than as expressly recited herein as being for the purpose of distinguishing such claim from known prior art are not being made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are being made only with an intent to change the literal scope of such claim in the most minimal way, i.e., to just avoid the prior art in a way that leaves the claim novel and not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, because a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims

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has been changed. This is true whether a dependent claim has been rewritten to expressly include the limitations of those claims on which it formerly depended or whether an independent claim has been rewritten to include the limitations of claims that previously depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

Rejection Under 35 U.S.C. §102

Claims 1 - 5, 7 - 18, and 21

Claims 1-5, 7-18, and 21 are rejected under 35 U.S.C. §102(b) as being anticipated by William. The rejection is traversed.

Claims 1 and 11

Anticipation requires the disclosure in a single prior art reference of each and every element of the claimed invention, arranged as in the claim. The William reference fails to disclose each and every element of Applicants' independent claim 1 as arranged in the claim.

More specifically, William does not teach or suggest at least:

"upon detecting the failure condition, triggering a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals."

as recited in independent claim 1 (emphasis added).

The Examiner suggests that William discloses a base station self-reconfiguration. Applicants respectfully disagree. The cited portions of William disclose that upon a base station failure, the output power of adjacent sectors or cells is increased to provide service in the sector affected by the failure. However, William fails to disclose that the adjacent sectors, cells, or <u>base stations are self-reconfigured</u>. Nowhere does William expressly state that base stations could be self-reconfigured. In contrast, William

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describes that if a base station or sectorized RCU has failed, Operation and Maintenance Center (\underline{OMC}) "take[s] action in order to provide communications coverage to the cell affected by the failure" by increasing output power of adjacent sectors or cells (see page 7, lines 24-33; see also page 5, lines 17-21 where the OMC instructs base stations on what power adjustments should be performed and where). Furthermore, as shown in Fig. 1 of William, the OMC is not a part of any particular base station. Rather, the OMC is coupled to multiple base stations and is responsible for controlling such base stations (see page 4, lines 6-16). Therefore, because William suggests that OMC configures base stations, such as their output power, William actually suggests an arrangement that is entirely different from Applicants' claimed embodiment, i.e., in William, base stations are reconfigured by another entity while according Applicants' claim 1, base stations are self-reconfigured. Therefore, William does not teach or suggest the "self-reconfiguration" feature of Applicants' claim 1.

Furthermore, now amended claim 1 recites that, by self-reconfiguring, the second base station element provides for continuity of the service for wireless terminals previously served by the first base station element where the second base station element initiates communication with such wireless terminals. William does not teach or suggest this feature. First, William is completely silent with respect to such a feature. Second, because typically, when a base station fails, the wireless terminals served by the failed stations are expected to detect such failure and connect to adjacent base stations when coverage is available from such adjacent base stations and because nothing in the William disclosure prevents wireless terminals from initiating connection to the adjacent base stations, initiating respective signaling from the second base station element to establish communication with each wireless terminal in the portion of the plurality of wireless terminals to provide continuity of the service to such terminals is not inherent from William.

Accordingly, William fails to teach or suggest all the elements of Applicants' independent claim 1 as arranged in the claim. Therefore, independent claim 1 is not anticipated by William and is allowable under 35 U.S.C. §102(b). Independent claim 11 recites at least limitations similar to those recited in independent claim 1 and discussed above. Therefore, for at least the reasons discussed above, independent claim 11 also is

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not anticipated by William and is allowable under 35 U.S.C. §102(b). Accordingly, the Examiner is respectfully requested to withdraw the rejection.

Claim 21

William does not anticipate claim 21 because William does not teach or suggest at least:

"wherein the at least one other <u>base station element is configured to initiate and establish</u>, after being reconfigured, <u>communications with wireless terminals</u> in the at least a portion of the plurality of wireless terminals <u>for providing continuity of the service</u> to the wireless terminals previously provided by the first base station element to the wireless terminals,"

as recited in independent claim 21 (emphasis added). As discussed above with respect to claim 1, William does not teach or suggest that reconfigured base stations initiate and establish communication with wireless terminals to provide continuous service to wireless terminals previously served by a failed base station. Therefore, for at least the reasons discussed above with respect such features, William does not anticipate claim 21.

Accordingly, independent claim 21 is allowable over William under 35 U.S.C. §102(b). The Examiner is respectfully requested to withdraw the rejection.

Claims 2-5, 7-10, and 12-18

Claims 2-5, 7-10, and 12-18 are claims depended from claims 1 or 11, and as such include all the limitations of the respective independent claim from which they ultimately depend. Therefore, each such dependent claim is also allowable over William under 35 U.S.C. §102 for at least the reasons discussed above with respect to claims 1 and 11.

Additionally, regarding dependent claims 2 and 3, Applicants respectfully note that features recited in this claims are not taught or suggested by William. In particular, William does not address whether original configurations of cells or base stations should be restored or when reconfiguration solutions are determined if ever. Therefore, William does not teach or suggest all of the features of claims 2 and 3 arranged as in the claims.

Additionally, with respect to dependent claims 5 and 15, William does not teach or suggest at least:

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"monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals,"

as recited in each of claims 5 and 15 (emphasis added). The Examiner suggests that such a feature is disclosed on page 5, lines 11 - 22 and 26 - 31 of William. Applicants respectfully disagree.

More specifically, the cited portion of William discloses existence of a mechanism for informing a base station controller about a failure on a base station or an RCU. The cited portion further discloses that the OMC can instruct a base stations to increase power transmitted from respective RCUs and that power output may be limited to a range of transmission. However, the cited portion does not disclose the above recited feature of claims 5 and 15. In fact, the cited portion does not even mention a wireless terminal, much less monitoring such wireless terminal to determine direction of its travel. Accordingly, William does not teach or suggest all of the features of claims 5 and 15 arranged as in the claims.

Therefore, Applicants' claims 2-5, 7-10, and 12-18 are allowable over William under 35 U.S.C. §102. Accordingly, the Examiner is respectfully requested to withdraw the rejection.

Claims 19 and 20

Claims 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood. The rejection is traversed.

Applicants' independent claim 19 recites in part:

"detecting, at a <u>first base station element</u>, that a failure condition occurred on a second base station element, wherein the <u>second base station element</u> was <u>serving a plurality of wireless terminals</u> prior to occurrence of the failure condition; and

reconfiguring ... the first base station element ..."

(emphasis added). Claim 20 recites similar features. Accordingly, Applicants' claims 19 and 20 recite two operating base station elements.

Stanwood, in contrast, discloses a communication device that switches between operating as a subscriber station and a base station. When a base station fails or is removed from the wireless system notwithstanding the reason for such a removal, another

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subscriber station takes over functionality of the removed base station. However, if changing the functionality of the subscriber station is equated to reconfiguring of such a subscriber station (as suggested by the Examiner), the entity that is being reconfigured is a subscriber station and not an operating base station element, as claimed by Applicants (see Stanwood, paragraph [0023]). Therefore, Stanwood fails to disclose the reconfiguring the first active base station element feature of claims 19 and 20.

Furthermore, with respect to claim 19, the configuration solution is based on at least a type of the failure condition. In Stanwood, on the other hand, how a particular subscriber station should be reconfigured is not based on a type of the failure condition. Rather, the device of Stanwood has two states of operation: (1) as a subscriber station and (2) as a base station. Further, when a particular base station cannot serve as such, another subscriber station becomes a base station, notwithstanding why that particular base station can no longer serve as the base station. Therefore, Stanwood fails to teach or suggest that the configuration solution is based on a type of the failure condition as required by claim 19.

Moreover, Stanwood is silent with respect to the feature of selecting the reconfiguration solution "from a plurality of pre-determined reconfiguration solutions associated with the first base station element," as recited in independent claim 20. As noted above, the only solution that Stanwood discloses is switching the functionality of a station from being a subscriber station to being a base station.

As such, Stanwood fails to disclose each and every element of claims 19 and 20 as arranged in the claims. Therefore, independent claims 19 and 20 are not anticipated by Stanwood and are allowable under 35 U.S.C. §102. The Examiner is respectfully requested to withdraw the rejection.

Rejection Under 35 U.S.C. §103

Claim 6

Claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood. The rejection is traversed.

This ground of rejection applies only to a dependent claim, and thus, is predicated on the validity of the rejection under 35 U.S.C. §102 given William. Because the

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rejection under 35 U.S.C. §102 given William has been overcome, as described hereinabove, and there is no argument put forth by the Office Action that the Stanwood supplies that which is missing from William to render independent claim 1 anticipated, this ground of rejection cannot be maintained.

Therefore, Applicants' claim 6 is allowable under 35 U.S.C. §103(a) over William in view of Stanwood. The Examiner is respectfully requested to withdraw the rejection.

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Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

If, however, the Examiner still believes that there are unresolved issues, the Examiner is invited to call Eamon Wall at (732) 842-8110 x 120 so that arrangements may be made to discuss and resolve any such issues.

Respectfully submitted,

Dated: $\frac{4/(3/69)}{}$

Michael Bentley
Registration No. 52

Registration No. 52,613 Attorney for Applicant

WALL & TONG, LLP 595 Shrewsbury Avenue, Suite 100 Shrewsbury, New Jersey 07702

Telephone: 732-842-8110 Facsimile: 732-842-8388

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s):

Asthana et al.

Serial No.:

11/354,709

Case:

Asthana 10-17-10-4 (ALU/127809) Filed:

02/15/2006

Examiner:

Ajibade Akonai, Olumide

Group Art Unit:

2617

Confirmation #:

1276

Title:

METHOD AND APPARATUS FOR IMPROVING WIRELESS

NETWORK RELIABILITY

MAIL STOP APPEAL BRIEF-PATENTS **COMMISSIONER FOR PATENTS** P.O. BOX 1450 **ALEXANDRIA, VA 22313-1450**

SIR:

APPEAL BRIEF

Appellants submit this Appeal Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 2617 mailed July 6, 2009 rejecting claims 1-21.

In the event that an extension of time is required for this appeal brief to be considered timely, and a petition therefor does not otherwise accompany this appeal brief, any necessary extension of time is hereby petitioned for.

The \$540 Appeal Brief fee is being paid with the EFS Web submission of this Appeal Brief. Appellants do not believe that any other fees are due. In the event Appellants are incorrect, the Commissioner is authorized to charge any other fees to Deposit Account No. 50-4802/ALU/127809.

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Real Party in Interest

The real party in interest is Alcatel Lucent, a publicly held company organized under the laws of France.

Related Appeals and Interferences

Appellants assert that no appeals or interferences are known to Appellants, Appellants' legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of Claims

Claims 1-21 are pending in the application. Claims 1-21 were originally presented in the application. Claims 1-5, 8-13 and 17-21 have been amended. The rejection of claims 1-21 is appealed.

Status of Amendments

All claim amendments have been entered.

Summary of Claimed Subject Matter

Embodiments of the present invention are generally directed to an apparatus and method for triggering a first base station element to attempt to reconfigure itself to be better able to serve at least a portion of a plurality of wireless terminals previously served by a second base station element that the first base station was able to serve prior to detection of an occurrence of a failure condition on the second base station element. More specifically, the first base station element attempts to take actions so as to reconfigure itself to be better able to serve at least a portion of the plurality of wireless terminals previously served by the second base station element that the first base station was able to serve prior to the occurrence of the failure condition on the second base station element.

In one embodiment of the invention, either the first base station element or the second base station element may detect the occurrence of the failure condition on the second base station element.

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In the embodiment where the second base station element detects the occurrence of the failure condition, the second base station element may generate a failure indication message adapted for notifying the first base station element of the occurrence of the failure condition. The second base station element on which the failure condition is detected transmits the failure indication message to the first base station element either directly or indirectly, e.g., via a base station controller.

For the convenience of the Board of Patent Appeals and Interferences, Appellants' independent claims 1, 11, 19, 20 and 21 are presented below with citations to various figures and appropriate citations to at least one portion of the specification for elements of the appealed claims.

Claim 1 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

1. (Previously Presented) A method (FIG. 7, 700; FIG. 8, 800), comprising the steps of:

detecting a failure condition on a first base station element, (FIG. 7, 704) wherein the first base station element was serving a plurality of wireless terminals prior to the occurrence of the failure condition; and (Pg. 11, lines 1-10)

upon detecting the failure condition, triggering a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals. (Pg. 9:4-31; Pg. 10:8-33; FIGs. 7-8)

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Claim 11 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

11. (Previously Presented) An apparatus (FIGs. 1-7; FIG. 9), comprising:

means for detecting a failure condition on a first base station element, wherein the first base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and (Pg. 8: 3-12; Pg. 9:6-23)

means for triggering, upon detecting the failure condition, a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal of the portion of the plurality of wireless terminals. (Pg. 9: 6-Pg. 11:10).

Claim 19 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

19. (Previously Presented) A method (FIG. 7, 700; FIG. 8, 800), comprising the steps of:

detecting, at a first base station element, that a failure condition occurred on a second base station element, wherein the second base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and (Pg. 9:4-31; Pg. 10:8-33; FIGs. 7-8)

reconfiguring, upon detecting the occurrence of the failure condition on the second base station element, the first base station element according to a reconfiguration solution determined based on at least a type of the failure condition, the reconfiguration solution adapted to Serial No. 11/354,709 Page 6 of 25

reconfigure the first base station element to serve at least one of the plurality of wireless terminals previously served by the second base station element. (Pg. 9:4-31; Pg. 10:8-33; FIGs. 7-8).

Claim 20 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

20. (Previously Presented) An apparatus (FIGs. 1-7; FIG. 9), comprising:

a input-output module for detecting, at a first base station element, an occurrence of a failure condition on a second base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and (FIG. 1, 112, 132; Pg. 11: 20-24)

a controller coupled to a receiver, the controller adapted to respond to the occurrence of the failure condition on the second base station element by triggering the first base station element to reconfigure itself according to a reconfiguration solution to serve at least a portion of the plurality of wireless terminals served by the second base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution is selected from a plurality of pre-determined reconfiguration solutions associated with the first base station element. (Pg. 19:9-24; Pg. 9: 6-Pg. 11:10).

Claim 21 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

21. (Previously Presented) An apparatus (FIGs. 1-7; FIG. 9), comprising:

means for detecting an occurrence of a failure condition on a first base station element that was serving a plurality of wireless terminals prior to the occurrence of the failure condition; (Pg. 11:1-10)

means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a

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portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution is based at least in part on a geographical location of the first base station element and a geographical location of the at least one other base station element; and (Pg. 9:4-31; Pg. 10:8-33; Pg. 12:7-18)

means for implementing the reconfiguration solution for reconfiguring the at least one other base station element to serve the at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the at least one other base station element is configured to initiate and establish, after being reconfigured, communications with wireless terminals in the at least a portion of the plurality of wireless terminals for providing continuity of the service to the wireless terminals previously provided by the first base station element to the wireless terminals. (Pg. 9:6-Pg. 11:10).

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Grounds of Rejection to be Reviewed on Appeal

- I. Claims 1, 4-5, 7-18, and 21 are rejected under 35 U.S.C. §102(b) as being anticipated by William et al., GB 2280570 A (hereinafter, "William").
- II. Claims 2, 3 and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood.
- III. Claims 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood et al., U.S. Publication No. 2006/0264214 (hereinafter, "Stanwood").

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ARGUMENTS

I. Rejection of claims 1, 4-5, 7-18, and 21 under 35 U.S.C. §102(b).

A.1. Claim 1.

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

1. The Examiner failed to establish a prima facie showing of anticipation because William fails to teach exactly what is claimed.

According to MPEP §2131.03 (III) "Anticipation under §102 can be found only when the reference discloses exactly what is claimed and that where there are differences between the reference disclosure and the claim, the rejection must be based on §103 which takes differences into account. Furthermore, in order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." See MPEP §2131.03 (II). (emphasis added).

The William reference fails to disclose exactly what is claimed in Appellants' independent claim 1.

More specifically, as recited in independent claim 1, William does not teach or suggest at least:

"upon detecting the failure condition, triggering a second base station element to <u>self-reconfigure</u> according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of self-reconfiguring, <u>initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals</u>," (emphasis added).

The Examiner suggests that William discloses a base station self-reconfiguration. Appellants respectfully disagree. The cited portions of William disclose that upon a base station failure, the output power of adjacent sectors or cells is increased to provide service in the sector affected by the failure. However, William fails to disclose that the adjacent sectors, cells, or <u>base stations are self-reconfigured</u>. Nowhere does William expressly or impliedly state that base stations could be self-reconfigured. In contrast, William describes that if a base station or sectorized RCU has failed, Operation and

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Maintenance Center (OMC) "take[s] action in order to provide communications coverage to the cell affected by the failure" by increasing output power of adjacent sectors or cells (see page 7, lines 24 - 33; see also page 5, lines 17 - 21 where the OMC instructs base stations on what power adjustments should be performed and where). Furthermore, as shown in Fig. 1 of William, the OMC is not a part of any particular base station. Rather, the OMC is coupled to multiple base stations and is responsible for controlling such base stations (see page 4, lines 6 - 16). Therefore, because William suggests that OMC configures base stations, such as their output power, William actually suggests an arrangement that is entirely different from Appellants' claimed embodiment, i.e., in William, base stations are reconfigured by another entity whereas in Appellants' claim 1, base stations are self-reconfigured. Therefore, William does not teach or suggest the "self-reconfiguration" feature of Appellants' claim 1.

2. <u>Amendment further distinguishes claimed embodiment.</u>

Furthermore, amended claim 1 recites that, by self-reconfiguring, the second base station element provides for continuity of the service for wireless terminals previously served by the first base station element where the second base station element initiates communication with such wireless terminals. William does not teach or suggest this feature. First, William is completely silent with respect to such a feature. Second, because typically, when a base station fails, the wireless terminals served by the failed stations are expected to detect such failure and connect to adjacent base stations when coverage is available from such adjacent base stations and because nothing in the William disclosure prevents wireless terminals from initiating connection to the adjacent base stations, initiating respective signaling from the second base station element to establish communication with each wireless terminal in the portion of the plurality of wireless terminals to provide continuity of the service to such terminals. Such features are not inherent in William.

Accordingly, William fails to teach or suggest exactly what is claimed in Appellants' independent claim 1.

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3. Broad Interpretation Inaccurate: All words in a claim must be considered.

On page 12 of the Final Office Action and in response to Appellants' argument that William fails to disclose the "self reconfiguration" feature, the Examiner states: "The base station in the adjacent cells/sectors can increase its power to be able to extend coverage range to the cell or sectors covered by the failed base station (see page 6, lines 17-31, page 7, lines 24-33), and this <u>broadly reads</u> on the claimed limitation of "self reconfiguration" as disclosed in the claims because the adjustment in transmit power of the base station of the adjacent cells/sectors occurs in the base station." (emphasis added).

Appellants respectfully submit that this broad interpretation is inaccurate, because William specifically discloses that in the event that a base station has failed, the operations and maintenance centre (OMC) can take action in order to provide communications coverage to the cell affected by the failure. (See page 7, lines 25-27). Moreover, this broad interpretation does not comport with the rules of the MPEP, which require that the reference discloses exactly what is claimed in order to anticipate a claimed feature under 35 U.S.C. U.S.C. §102(b) and where there are differences between the reference disclosure and the claim, the rejection must be based on §103 which takes differences into account. (See MPEP §2131.03 (III)).

Still further, Appellants could not discern any reference that fairly suggests the above recitation. As articulated above, William is completely silent with respect to such a feature. In order for the Examiner to arrive at such conclusion, apparently the phrase "self reconfiguration" was not accorded any patentable weight within the context of the claims. All words in a claim must be considered in judging the patentability of that claim against the prior art. (See MPEP §2143.03). One cannot divine claim meaning in a vacuum. Philips v. AWH Corporation (Fed. Cir. July 12, 2005). According to MPEP §2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art" (quoting, In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)).

4. <u>Conclusion</u>.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 1. Accordingly, independent claim 1 is not anticipated by William and is allowable under 35 U.S.C. §102.

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A.2. Claim 11.

Claim 11 is rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

As articulated above with respect to claim 1, William fails to teach exactly all elements of independent claim 11 as required under 35 U.S.C. §102 for establishing a *prima facie* showing of anticipation. Independent claim 11 recites at least some of the elements of independent claim 1 that are discussed above. Therefore, for at least the reasons discussed above, independent claim 11 also is patentable under 35 U.S.C. §102(b) over William. Set forth below are additional reasons why William does not anticipate the embodiments of claim 11.

1. Specific Structure described in specification must be considered.

Further, claim 11 utilizes "means for" recitations, and as such requires the Examiner to consider the specific structure described in the specification to interpret these limitations. (See MPEP §2181). In particular, claim 11 recites in part: "means for triggering, upon detecting the failure condition, a second base station element to selfreconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition." As articulated above, William discloses that in the event that a base station has failed, the operations and maintenance centre (OMC) can take action in order to provide communications coverage to the cell affected by the failure as opposed to a second base station element to reconfigure. Further, FIGs. 1-6 depict specific structures encompassing the claimed embodiments. Therefore, the "means for" limitation recited in the invention cannot be broadly interpreted by the Examiner to read on the implementation taught by William. In re Donaldson Co., 16 F.3d 1189, 29 USPO2d 1845 (Fed. Cir. 1994). The structures disclosed by the Applicant cannot be disregarded. Because William does not teach or suggest each and every element of claim 11, it does not anticipate claim 11.

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2. Conclusion.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 11. Accordingly, independent claim 11 is not anticipated by William and is allowable under 35 U.S.C. §102.

A.3. Claim 21.

Claim 21 is rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

As articulated above with respect to claim 1, William fails to teach exactly all elements of independent claims 21 as required under 35 U.S.C. §102 for establishing a *prima facie* showing of anticipation. Independent claim 21 recites at least some of the elements of independent claim 1 that are discussed above. Therefore, for at least the reasons discussed above, independent claim 21 also is patentable under 35 U.S.C. §102(b) over William. Set forth below are additional reasons why William does not anticipate the embodiments of claim 21.

1. William fails to at least teach the below listed claimed feature.

William does not anticipate claim 21 because William does not teach or suggest at least the following feature:

"wherein the at least one other <u>base station element is configured to initiate and establish</u>, after being reconfigured, <u>communications with wireless terminals</u> in the at least a portion of the plurality of wireless terminals <u>for providing continuity of the service</u> to the wireless terminals previously provided by the first base station element to the wireless terminals," (emphasis added).

As discussed above with respect to claim 1, William does not teach or suggest that reconfigured base stations initiate and establish communication with wireless terminals to provide continuous service to wireless terminals previously served by a failed base station. Therefore, for at least the reasons discussed above with respect to such features, William does not anticipate claim 21.

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2. Specific Structure described in specification must be considered.

Further, claim 21 utilizes "means for" recitations, and as such requires the Examiner to consider the specific structure described in the specification to interpret these limitations. (See MPEP §2181). In particular, claim 21 recites in part: "means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution is based at least in part on a geographical location of the first base station element and a geographical location of the at least one other base station element." As articulated above, William discloses that in the event that a base station has failed, the operations and maintenance centre (OMC) can take action in order to provide communications coverage to the cell affected by the failure as opposed to a second base station element to reconfigure. Further, FIGs. 1-6 depict specific structures encompassing the claimed embodiments. Therefore, the "means for" limitation recited in the invention cannot be broadly interpreted by the Examiner to read on the implementation taught by William. In re Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994). The structures disclosed by the Applicant cannot be disregarded. Because William does not teach or suggest each and every element of claim 21, it does not anticipate claim 21.

3. Conclusion.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 21. Accordingly, independent claim 21 is not anticipated by William and is allowable under 35 U.S.C. §102.

A.4. Claims 4-5, 7-10, and 12-18.

Claims 4-5, 7 - 10, and 12 - 18 are rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

This ground of rejection applies only to dependent claims, and is predicated on the validity of the rejection under 35 U.S.C. §102 given William as applied to claims 1 and 11 above.

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As articulated above with respect to claims 1 and 11, there are missing claimed features not taught/suggested by the cited references – including "self reconfiguration." (emphasis added). – and thus, dependent claims 4-5, 7-10 and 12-18 have been erroneously rejected under 35 U.S.C. §102(b). The Examiner failed to establish a *prima facie* showing of anticipation.

Therefore, Appellants' claims 4-5, 7-10 and 12-18 are patentable under 35 U.S.C. §102(b) over William as applied to claims 1 and 11 above.

Additionally, with respect to dependent claims 5 and 15, William does not teach or suggest at least:

"monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals,"

as recited in each of claims 5 and 15 (emphasis added). The Examiner suggests that such a feature is disclosed on page 5, lines 11 - 22 and 26 - 31 of William. Appellants respectfully disagree.

More specifically, the cited portion of William discloses existence of a mechanism for informing a base station controller about a failure on a base station or an RCU. The cited portion further discloses that the OMC can instruct a base station to increase power transmitted from respective RCUs and that power output may be limited to a range of transmission. However, the cited portion does not disclose the above recited feature of claims 5 and 15. In fact, the cited portion does not even mention a wireless terminal, much less monitoring such wireless terminal to determine direction of its travel. Accordingly, William does not teach or suggest all of the features of claims 5 and 15 arranged as in the claims.

II. Rejection of claims 2-3 and 6 under 35 U.S.C. §103(a).

Claims 2, 3 and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood. Appellants urge to the contrary.

This ground of rejection applies only to dependent claims, and is predicated on the validity of the rejection under 35 U.S.C. §102 given William as applied to claim 1 above.

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As articulated above with respect to claim 1, there are missing claimed features not taught/suggested by the cited references – including "self reconfiguration." (emphasis added). – and thus, dependent claims 2-3 and 6 have been erroneously rejected under 35 U.S.C. §103(a). The Examiner failed to establish a *prima facie* showing of obviousness.

Therefore, Appellants' claims 2-3 and 6 are patentable under 35 U.S.C. §103(a) over William in view of Stanwood.

III. Rejection of claims 19 and 20 under 35 U.S.C. §102(e).

Claims 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood et al., U.S. Publication No. 2006/0264214 (hereinafter, "Stanwood").

A.1. Claim 19.

Claim 19 is rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood. Appellants urge to the contrary.

1. The Examiner failed to establish a prima facie showing of anticipation because Stanwood fails to teach exactly what is claimed.

According to MPEP §2131.03 (III) "Anticipation under §102 can be found only when the reference discloses exactly what is claimed and that where there are differences between the reference disclosure and the claim, the rejection must be based on §103 which takes differences into account. Furthermore, in order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." See MPEP §2131.03 (II). (emphasis added).

The Stanwood reference fails to disclose exactly what is claimed in Appellants' independent claim 19.

More specifically, as recited in independent claim 19, Stanwood does not teach or suggest at least:

"detecting, at a <u>first base station element</u>, that a failure condition occurred on a second base station element, wherein the <u>second base station element</u> was <u>serving a plurality of wireless terminals</u> prior to occurrence of the failure condition; and

reconfiguring ... the first base station element ... " (emphasis added).

Stanwood, in contrast, discloses a communication device that switches between operating as a subscriber station and a base station. When a base station fails or is

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removed from the wireless system notwithstanding the reason for such a removal, another subscriber station takes over functionality of the removed base station. However, if changing the functionality of the subscriber station is equated to reconfiguring of such a subscriber station (as suggested by the Examiner), the entity that is being reconfigured is a subscriber station and not an operating base station element, as claimed by Appellants (see Stanwood, paragraph [0023]). Therefore, Stanwood fails to disclose reconfiguring the first active base station element feature of claim 19.

Furthermore, with respect to claim 19, the configuration solution is based on at least a type of the failure condition. In Stanwood, on the other hand, how a particular subscriber station should be reconfigured is not based on a type of the failure condition. Rather, the device of Stanwood has two states of operation: (1) as a subscriber station and (2) as a base station. Further, when a particular base station cannot serve as such, another subscriber station becomes a base station, notwithstanding why that particular base station can no longer serve as the base station. Therefore, Stanwood fails to teach or suggest that the configuration solution is based on a type of the failure condition as required by claim 19.

2. Conclusion.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 19. Accordingly, independent claim 19 is not anticipated by William and is allowable under 35 U.S.C. §102.

A.2. Claim 20.

Claim 20 is rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood. Appellants urge to the contrary.

As articulated above with respect to claim 19, Stanwood fails to teach exactly all elements of independent claim 20 as required under 35 U.S.C. §102 for establishing a *prima facie* showing of anticipation. Independent claim 20 recites at least some of the elements of independent claim 19 that are discussed above. Therefore, for at least the reasons discussed above, independent claim 20 also is patentable under 35 U.S.C. §102(e) over Stanwood.

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Moreover, Stanwood is silent with respect to the feature of selecting the reconfiguration solution "from a plurality of pre-determined reconfiguration solutions associated with the first base station element," as recited in independent claim 20. As noted above, the only solution that Stanwood discloses is switching the functionality of a station from being a subscriber station to being a base station.

As such, Stanwood fails to disclose exactly all elements of claim 20. Therefore, independent claim 20 is not anticipated by Stanwood and is allowable under 35 U.S.C. §102.

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Conclusion

Thus, Appellants submit that all of the claims presently in the application are allowable.

For the reasons advanced above, Appellants respectfully urge that the rejection of claims 1-21 is improper. Reversal of the rejection of the Office Action is respectfully requested.

Respectfully submitted,

Dated: 9/11/09

Eamon J. Wall

Registration No. 39,414

Wall & Tong, L.L.P. 595 Shrewsbury Ave. Shrewsbury, NJ 07702

Telephone: (732) 842-8110 x120 Facsimile: (732) 842-8388

Attorney for Appellant(s)

CLAIMS APPENDIX

1. (previously presented) A method, comprising the steps of:

detecting a failure condition on a first base station element, wherein the first base station element was serving a plurality of wireless terminals prior to the occurrence of the failure condition; and

upon detecting the failure condition, triggering a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals.

- 2. (previously presented) The method of claim 1, further comprising:
- upon determining that the failure condition has been cleared on the first base station element, restoring an original configuration of the second base station element.
- 3. (previously presented) The method of claim 1, wherein the reconfiguration solution is pre-determined prior to the occurrence of the failure condition.
- 4. (previously presented) The method of claim 1, wherein the reconfiguration solution comprises:

increasing a power level employed by the second base station element for expanding a wireless coverage area of the second base station element.

5. (previously presented) The method of claim 1, wherein the reconfiguration solution comprises:

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monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals; and

establishing a connection with each of the plurality of wireless terminals for which the direction of travel is toward the second base station element by initiating respective signaling at the second base station element.

- 6. (original) The method of claim 1, wherein the failure condition is detected by the second base station element.
- 7. (original) The method of claim 1, wherein the failure condition is detected by the first base station element.
- 8. (previously presented) The method of claim 7, further comprising the step of: in response to detecting the failure condition, generating a failure indication message adapted to trigger the second base station element to self-reconfigure; and

transmitting the failure indication message toward at least one of the second base station element and a base station controller.

- 9. (previously presented) The method of claim 8, wherein if the failure condition is associated with a wireless communication portion of the first base station element, the failure indication message is generated for transmission by a wireline portion of the first base station element.
- 10. (previously presented) The method of claim 8, wherein if the failure condition is associated with a wireline communication portion of the first base station element, the failure indication message is generated for transmission by a wireless portion of the first base station element.
- 11. (previously presented) An apparatus, comprising:

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means for detecting a failure condition on a first base station element, wherein the first base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

means for triggering, upon detecting the failure condition, a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal of the portion of the plurality of wireless terminals.

12. (previously presented) The apparatus of claim 11, wherein the means for triggering comprises:

means for determining the reconfiguration solution.

- 13. (previously presented) The apparatus of claim 11, further comprising:

 means for reconfiguring the second base station element according to the reconfiguration solution.
- 14. (original) The apparatus of claim 13, wherein the means for reconfiguring the second base station element comprises:

means for increasing a power level employed by the second base station element for expanding a wireless coverage area of the second base station element.

15. (original) The apparatus of claim 13, wherein the means for reconfiguring the second base station element comprises:

means for monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals; and

means for establishing a connection with each of the plurality of wireless terminals for which the direction of travel is toward the second base station element.

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16. (original) The apparatus of claim 11, wherein the failure condition is detected by the first base station element.

17. (previously presented) The apparatus of claim 16, further comprising:

means for generating, in response to detecting the failure condition, a failure indication message adapted to trigger the second base station element to self-reconfigure; and

means for transmitting the failure indication message toward at least one of the second base station element and a base station controller.

18. (previously presented) The apparatus of claim 17, wherein if the failure condition is associated with a wireless communication portion of the first base station element, the failure indication message is generated via a wireline portion of the first base station element.

19. (previously presented) A method, comprising the steps of:

detecting, at a first base station element, that a failure condition occurred on a second base station element, wherein the second base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

reconfiguring, upon detecting the occurrence of the failure condition on the second base station element, the first base station element according to a reconfiguration solution determined based on at least a type of the failure condition, the reconfiguration solution adapted to reconfigure the first base station element to serve at least one of the plurality of wireless terminals previously served by the second base station element.

20. (previously presented) An apparatus, comprising:

a input-output module for detecting, at a first base station element, an occurrence of a failure condition on a second base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and Serial No. 11/354,709 Page 24 of 25

a controller coupled to a receiver, the controller adapted to respond to the occurrence of the failure condition on the second base station element by triggering the first base station element to reconfigure itself according to a reconfiguration solution to serve at least a portion of the plurality of wireless terminals served by the second base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution is selected from a plurality of pre-determined reconfiguration solutions associated with the first base station element.

21. (previously presented) An apparatus, comprising:

means for detecting an occurrence of a failure condition on a first base station element that was serving a plurality of wireless terminals prior to the occurrence of the failure condition;

means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution is based at least in part on a geographical location of the first base station element and a geographical location of the at least one other base station element; and

means for implementing the reconfiguration solution for reconfiguring the at least one other base station element to serve the at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the at least one other base station element is configured to initiate and establish, after being reconfigured, communications with wireless terminals in the at least a portion of the plurality of wireless terminals for providing continuity of the service to the wireless terminals previously provided by the first base station element to the wireless terminals.

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EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s):

Asthana et al.

Serial No.:

11/354,709

Case:

Asthana 10-17-10-4 (ALU/127809) Filed:

02/15/2006

Examiner:

Ajibade Akonai, Olumide

Group Art Unit:

2617

Confirmation #:

1276

Title:

METHOD AND APPARATUS FOR IMPROVING WIRELESS

NETWORK RELIABILITY

MAIL STOP APPEAL BRIEF-PATENTS **COMMISSIONER FOR PATENTS** P.O. BOX 1450 **ALEXANDRIA, VA 22313-1450**

SIR:

REPLY BRIEF

Appellants submit this Reply Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 2617 mailed December 16, 2009, reopening prosecution and rejecting claims 1-21 with new grounds of rejection.

In the event that an extension of time is required for this appeal brief to be considered timely, and a petition therefor does not otherwise accompany this appeal brief, any necessary extension of time is hereby petitioned for.

The \$540 Appeal Brief fee was being paid with the EFS Web submission of Appellants' Appeal Brief filed on September 15, 2009. Appellants do not believe that any other fees are due. In the event Appellants are incorrect, the Commissioner is authorized to charge any other fees to Deposit Account No. 50-4802/ALU/127809.

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Real Party in Interest

The real party in interest is Alcatel-Lucent.

Related Appeals and Interferences

Appellants assert that no appeals or interferences are known to Appellants, Appellants' legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of Claims

Claims 1-21 are pending in the application. Claims 1-21 were originally presented in the application. Claims 1-5, 8-13 and 17-21 have been amended. On 9/15/2009, Appellants filed an Appeal Brief in support of the Final Office Action's appeal. Subsequently, the Examiner reopened prosecution and rejected claims 1-21 with new grounds of rejection. The rejection of claims 1-21 is appealed anew.

Status of Amendments

All claim amendments have been entered.

Summary of Claimed Subject Matter

Embodiments of the present invention are generally directed to an apparatus and method for triggering a first base station element to attempt to reconfigure itself to be better able to serve at least a portion of a plurality of wireless terminals previously served by a second base station element that the first base station was able to serve prior to detection of an occurrence of a failure condition on the second base station element. More specifically, the first base station element attempts to take actions so as to reconfigure itself to be better able to serve at least a portion of the plurality of wireless terminals previously served by the second base station element that the first base station was able to serve prior to the occurrence of the failure condition on the second base station element.

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In one embodiment of the invention, either the first base station element or the second base station element may detect the occurrence of the failure condition on the second base station element.

In the embodiment where the second base station element detects the occurrence of the failure condition, the second base station element may generate a failure indication message adapted for notifying the first base station element of the occurrence of the failure condition. The second base station element on which the failure condition is detected transmits the failure indication message to the first base station element either directly or indirectly, e.g., via a base station controller.

For the convenience of the Board of Patent Appeals and Interferences, Appellants' independent claims 1, 11, 19, 20 and 21 are presented below with citations to various figures and appropriate citations to at least one portion of the specification for elements of the appealed claims.

Claim 1 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

1. (Previously Presented) A method (FIG. 7, 700; FIG. 8, 800), comprising the steps of:

detecting a failure condition on a first base station element, (FIG. 7, 704) wherein the first base station element was serving a plurality of wireless terminals prior to the occurrence of the failure condition; and (Pg. 11, lines 1-10)

upon detecting the failure condition, triggering a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish

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communication with each wireless terminal in the portion of the plurality of wireless terminals. (Pg. 9:4-31; Pg. 10:8-33; FIGs. 7-8)

Claim 11 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

11. (Previously Presented) An apparatus (FIGs. 1-7; FIG. 9), comprising:

means for detecting a failure condition on a first base station element, wherein the first base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and (Pg. 8: 3-12; Pg. 9:6-23)

means for triggering, upon detecting the failure condition, a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal of the portion of the plurality of wireless terminals. (Pg. 9: 6-Pg. 11:10).

Claim 19 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

19. (Previously Presented) A method (FIG. 7, 700; FIG. 8, 800), comprising the steps of:

detecting, at a first base station element, that a failure condition occurred on a second base station element, wherein the second base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and (Pg. 9:4-31; Pg. 10:8-33; FIGs. 7-8)

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reconfiguring, upon detecting the occurrence of the failure condition on the second base station element, the first base station element according to a reconfiguration solution determined based on at least a type of the failure condition, the reconfiguration solution adapted to reconfigure the first base station element to serve at least one of the plurality of wireless terminals previously served by the second base station element. (Pg. 9:4-31; Pg. 10:8-33; FIGs. 7-8).

Claim 20 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

20. (Previously Presented) An apparatus (FIGs. 1-7; FIG. 9), comprising:

a input-output module for detecting, at a first base station element, an occurrence of a failure condition on a second base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and (FIG. 1, 112, 132; Pg. 11: 20-24)

a controller coupled to a receiver, the controller adapted to respond to the occurrence of the failure condition on the second base station element by triggering the first base station element to reconfigure itself according to a reconfiguration solution to serve at least a portion of the plurality of wireless terminals served by the second base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution is selected from a plurality of pre-determined reconfiguration solutions associated with the first base station element. (Pg. 19:9-24; Pg. 9: 6-Pg. 11:10).

Claim 21 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

21. (Previously Presented) An apparatus (FIGs. 1-7; FIG. 9), comprising:

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> means for detecting an occurrence of a failure condition on a first base station element that was serving a plurality of wireless terminals prior to the occurrence of the failure condition; (Pg. 11:1-10)

> means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution is based at least in part on a geographical location of the first base station element and a geographical location of the at least one other base station element; and (Pg. 9:4-31; Pg. 10:8-33; Pg. 12:7-18)

means for implementing the reconfiguration solution for reconfiguring the at least one other base station element to serve the at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the at least one other base station element is configured to initiate and establish, after being reconfigured, communications with wireless terminals in the at least a portion of the plurality of wireless terminals for providing continuity of the service to the wireless terminals previously provided by the first base station element to the wireless terminals. (Pg. 9:6-Pg. 11:10).

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Grounds of Rejection to be Reviewed on Appeal

Claims 1-21 are pending in the application of which claims 1, 11, 19, 20 and 21 are independent.

Claims 1, 4, 7 - 14, 16 - 18 and 21 are rejected under 35 U.S.C. §102(b) as being anticipated by William et al., GB 2280570 A (hereinafter, "William").

Claims 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood et al., U.S. Publication No. 2006/0264214 (hereinafter, "Stanwood").

Claims 2, 3 and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood.

Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over William in view of Barak et al., 20040077349 (hereinafter "Barak").

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ARGUMENTS

I. Rejection of claims 1, 4, 7–14, 16-18 and 21 under 35 U.S.C. §102(b).

A.1. Claim 1.

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

Appellants initially show error in the rejection of claim 1 in that the Examiner failed to establish a factual basis to support the legal conclusion of anticipation.

According to MPEP §2131.03 (III) "Anticipation under §102 can be found only when the reference discloses exactly what is claimed and that where there are differences between the reference disclosure and the claim, the rejection must be based on §103 which takes differences into account. Furthermore, in order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." See MPEP §2131.03 (II). (emphasis added).

1. The Examiner's Assertion in The "Response to Arguments" Section Is

Inaccurate.

In the "Response Section" of the 12/16/2009 Office Action, the Examiner states:

"Regarding claims 1, 11 and 21, the applicants' representative asserts [sic] that William fails to disclose the "self reconfiguration" feature."

As shown below, the claimed element involves more than this "self reconfiguration" feature referred to by the Examiner. In an attempt to make-up for the weakness of the reference, the Examiner latches to this "self reconfiguration" feature and then proceeds to find this phrase in the reference. The Examiner gives no weight or meaning to the phrases "triggering a second base station element to," "according to a reconfiguration solution" "wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element upon completion of self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals," among others.

¹ Appellants filed an Appeal Brief on 9/15/2009. Subsequently, the Examiner reopened prosecution. This Reply Brief is in response to the Office Action.

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(emphasis added). With respect to the instant claims, the context and proper interpretation of the initial claim term is simply lost using this analysis technique. Taken to an extreme, a claim term may be broken into individual letters, which letters are likely present in any reference. The presence of the individual letters in a reference does not mean that the initial claim term has been disclosed or suggested. The Examiner is wrong in the interpretation of the teaching of the reference, irrespective of the reference portions from which the alleged teachings are called.

i. William lacks the required specificity under 102.

Furthermore, in order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." See MPEP §2131.03 (II). (emphasis added).

The Examiner went on to describe the Examiner's interpretation of the claimed element. To support such interpretation, the Examiner cites long passages extending over pages, e.g., see page 6, lines 17-31, page 7, lines 24-33. This posture does not adhere to the guidelines set forth in the MPEP and 37 CFR §1.104. Specifically, 37 CFR §1.104(c)(2) provides:

"In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified."

The Examiner should map all claim limitations to the pertinent sections of the prior art reference or provide an explanation. The failure to do so deprives Appellant of the opportunity to ascertain the veracity of the Examiner's claim construction to thereby traverse the rejection.

Accordingly, because the cited reference does not describe each element of Appellant's claim 1 with sufficient specificity and because the Examiner does not provide a rationale for the missing elements, a *prima facie* case of anticipation regarding claim 1 has not been established.

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ii. The patent disclosure serves to point toward the proper meanings.

The MPEP makes clear that the intrinsic record (e.g., the specification) must be consulted to identify which of the different possible definitions is most consistent with the invention's use of the terms. See MPEP §2111.01 (III) quoting *Brookhill-Wilk* 1, 334 F.3d at 1300, 67 USPQ2d at 113 ("Where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meanings.")

One skilled in the art would clearly understand the terms as disclosed and claimed in the instant application. In particular, the term reconfiguration although depicted and described as using power level increases for reconfiguration of base station elements in response to failure conditions, reconfiguration of base station elements may be performed using various other reconfiguration solutions. For example, on page 11, starting at line 1, the specification discloses various reconfiguration solutions. One solution describes the BSR-based network portion deployed overlaying the BS-based network portion may be reconfigured to provide service to wireless terminals previously served by the BS-based network portion. In one embodiment of the present invention, the BS-based network portion supporting the BSR-based network portion may be reconfigured to provide service to wireless terminals previously served by the BSR-based network portion. As such, base station element reconfiguration may be performed in a wireless network irrespective of wireless network (e.g., wireless network type, wireless network configuration, and the like), base station element type, and various other technology-specific networks, network elements, protocols, and the like.

Similar knowledge of base reconfiguration would also be understood by one skilled in the art informed by the teachings of the present application.

Accordingly, because the cited reference does not describe each element of Appellant's claim 1 with sufficient specificity and because the Examiner does not provide a rationale for the missing elements, a *prima facie* case of anticipation regarding claim 1 has not been established.

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iii. Specific Structure described in specification must be considered.

On page 4 of the 12/16/2009 Office Action in the "Response Section," the Examiner states:

"Regarding claims 11 and 21, the applicants' representative asserts that William fails to teach or suggest at least "means for" limitation in the invention. Claims 11 and 21 above clearly disclose an apparatus performing the claimed limitations recited by "means for" limitation and as such, clearly reads on the applicants' claimed limitation. The OMC performs the triggering, upon detecting the failure condition, thus it clearly has the means for performing, upon detecting the failure condition as disclosed by the applicants."

In the Appeal Brief filed on 9/15/2009, Appellants addressed this issue. It was brought to the Examiner's attention that when a claim utilizes "means for" recitations, the Examiner is required to consider the specific structure described in the specification to interpret these limitations. (See MPEP §2181). However, as can be seen from above passage, the Examiner states that the OMC clearly has the means for performing, upon detecting the failure condition as disclosed by the applicants." Again, the "means for" limitation recited in the invention cannot be broadly interpreted by the Examiner to read on the implementation taught by William. *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994). The Court in Donaldson stated:

Per our holding, the "broadest reasonable interpretation" that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.

The Examiner's approach is opposite to the Court's mandate.

These arguments are incorporated by reference in connection with the rejection of claims 11 and 21 below.

Accordingly, because the cited reference does not describe each element of Appellant's claim 1 with sufficient specificity and because the Examiner does not provide a rationale for the missing elements, a *prima facie* case of anticipation regarding claim 1 has not been established.

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2. The Examiner failed to establish a prima facie showing of anticipation because William fails to teach exactly what is claimed.

The William reference fails to disclose exactly what is claimed in Appellants' independent claim 1.

More specifically, as recited in independent claim 1, William does not teach or suggest at least:

"upon detecting the failure condition, triggering a second base station element to <u>self-reconfigure</u> according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of self-reconfiguring, <u>initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals</u>," (emphasis added).

The Examiner suggests that William discloses a base station self-reconfiguration. Appellants respectfully disagree. The cited portions of William disclose that upon a base station failure, the output power of adjacent sectors or cells is increased to provide service in the sector affected by the failure. However, William fails to disclose that the adjacent sectors, cells, or base stations are self-reconfigured. Nowhere does William expressly or impliedly state that base stations could be self-reconfigured. In contrast, William describes that if a base station or sectorized RCU has failed, Operation and Maintenance Center (OMC) "take[s] action in order to provide communications coverage to the cell affected by the failure" by increasing output power of adjacent sectors or cells (see page 7, lines 24 - 33; see also page 5, lines 17 - 21 where the OMC instructs base stations on what power adjustments should be performed and where). Furthermore, as shown in Fig. 1 of William, the OMC is not a part of any particular base station. Rather, the OMC is coupled to multiple base stations and is responsible for controlling such base stations (see page 4, lines 6 - 16). Therefore, because William suggests that OMC configures base stations, such as their output power, William actually suggests an arrangement that is entirely different from Appellants' claimed embodiment, i.e., in William, base stations are reconfigured by another entity whereas in Appellants' claim 1,

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base stations are self-reconfigured. Therefore, William does not teach or suggest the "self-reconfiguration" feature of Appellants' claim 1.

3. <u>Amendment further distinguishes claimed embodiment.</u>

Furthermore, amended claim 1 recites that, by self-reconfiguring, the second base station element provides for continuity of the service for wireless terminals previously served by the first base station element where the second base station element initiates communication with such wireless terminals. William does not teach or suggest this feature. First, William is completely silent with respect to such a feature. Second, because typically, when a base station fails, the wireless terminals served by the failed stations are expected to detect such failure and connect to adjacent base stations when coverage is available from such adjacent base stations and because nothing in the William disclosure prevents wireless terminals from initiating connection to the adjacent base stations, initiating respective signaling from the second base station element to establish communication with each wireless terminal in the portion of the plurality of wireless terminals to provide continuity of the service to such terminals. Such features are not inherent in William.

Accordingly, William fails to teach or suggest exactly what is claimed in Appellants' independent claim 1.

4. Broad Interpretation Inaccurate: All words in a claim must be considered.

On page 12 of the Final Office Action and in response to Appellants' argument that William fails to disclose the "self reconfiguration" feature, the Examiner states: "The base station in the adjacent cells/sectors can increase its power to be able to extend coverage range to the cell or sectors covered by the failed base station (see page 6, lines 17-31, page 7, lines 24-33), and this <u>broadly reads</u> on the claimed limitation of "self reconfiguration" as disclosed in the claims because the adjustment in transmit power of the base station of the adjacent cells/sectors occurs in the base station." (emphasis added).

Appellants respectfully submit that this broad interpretation is inaccurate, because William specifically discloses that in the event that a base station has failed, the operations and maintenance centre (OMC) can take action in order to provide

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communications coverage to the cell affected by the failure. (See page 7, lines 25-27). Moreover, this broad interpretation does not comport with the rules of the MPEP, which require that the reference discloses <u>exactly</u> what is claimed in order to anticipate a claimed feature under 35 U.S.C. U.S.C. §102(b) and where there are differences between the reference disclosure and the claim, the rejection must be based on §103 which takes differences into account. (See MPEP §2131.03 (III)).

Still further, Appellants could not discern any reference that fairly suggests the above recitation. As articulated above, William is completely silent with respect to such a feature. In order for the Examiner to arrive at such conclusion, apparently the phrase "self reconfiguration" was not accorded any patentable weight within the context of the claims. All words in a claim must be considered in judging the patentability of that claim against the prior art. (See MPEP §2143.03). One cannot divine claim meaning in a vacuum. Philips v. AWH Corporation (Fed. Cir. July 12, 2005). According to MPEP §2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art" (quoting, In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)).

5. Conclusion.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 1. Accordingly, independent claim 1 is not anticipated by William and is allowable under 35 U.S.C. §102.

A.2. Claim 11.

Claim 11 is rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

As articulated above with respect to claim 1, William fails to teach exactly all elements of independent claim 11 as required under 35 U.S.C. §102 for establishing a *prima facie* showing of anticipation. Independent claim 11 recites at least some of the elements of independent claim 1 that are discussed above. Therefore, for at least the reasons discussed above, independent claim 11 also is patentable under 35 U.S.C. §102(b) over William. Set forth below are additional reasons why William does not anticipate the embodiments of claim 11.

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1. Specific Structure described in specification must be considered.

Further, claim 11 utilizes "means for" recitations, and as such requires the Examiner to consider the specific structure described in the specification to interpret these limitations. (See MPEP §2181). In particular, claim 11 recites in part: "means for triggering, upon detecting the failure condition, a second base station element to selfreconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition." As articulated above, William discloses that in the event that a base station has failed, the operations and maintenance centre (OMC) can take action in order to provide communications coverage to the cell affected by the failure as opposed to a second base station element to reconfigure. Further, FIGs. 1-6 depict specific structures encompassing the claimed embodiments. Therefore, the "means for" limitation recited in the invention cannot be broadly interpreted by the Examiner to read on the implementation taught by William. In re Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994). The structures disclosed by the Appellant cannot be disregarded. Because William does not teach or suggest each and every element of claim 11, it does not anticipate claim 11.

2. Conclusion.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 11. Accordingly, independent claim 11 is not anticipated by William and is allowable under 35 U.S.C. §102.

A.3. Claim 21.

Claim 21 is rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

As articulated above with respect to claim 1, William fails to teach exactly all elements of independent claims 21 as required under 35 U.S.C. §102 for establishing a *prima facie* showing of anticipation. Independent claim 21 recites at least some of the

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elements of independent claim 1 that are discussed above. Therefore, for at least the reasons discussed above, independent claim 21 also is patentable under 35 U.S.C. §102(b) over William. Set forth below are additional reasons why William does not anticipate the embodiments of claim 21.

1. William fails to at <u>least teach</u> the below listed claimed feature.

William does not anticipate claim 21 because William does not teach or suggest at least the following feature:

"wherein the at least one other <u>base station element is configured to initiate and establish</u>, after being reconfigured, <u>communications with wireless terminals</u> in the at least a portion of the plurality of wireless terminals <u>for providing continuity of the service</u> to the wireless terminals previously provided by the first base station element to the wireless terminals," (emphasis added).

As discussed above with respect to claim 1, William does not teach or suggest that reconfigured base stations initiate and establish communication with wireless terminals to provide continuous service to wireless terminals previously served by a failed base station. Therefore, for at least the reasons discussed above with respect to such features, William does not anticipate claim 21.

2. Specific Structure described in specification must be considered.

Further, claim 21 utilizes "means for" recitations, and as such requires the Examiner to consider the specific structure described in the specification to interpret these limitations. (See MPEP §2181). In particular, claim 21 recites in part: "means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution is based at least in part on a geographical location of the first base station element and a geographical location of the at least one other base station element." As articulated above, William discloses that in the event that a base station has failed, the operations and maintenance centre (OMC) can take action in order to provide communications coverage to the cell affected by the failure as opposed to a second base station element to reconfigure. Further, FIGs. 1-6 depict specific structures encompassing the claimed

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embodiments. Therefore, the "means for" limitation recited in the invention cannot be broadly interpreted by the Examiner to read on the implementation taught by William. In re Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994). The structures disclosed by the Appellant cannot be disregarded. Because William does not teach or suggest each and every element of claim 21, it does not anticipate claim 21.

3. Conclusion.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 21. Accordingly, independent claim 21 is not anticipated by William and is allowable under 35 U.S.C. §102.

A.4. Claims 4, 7–10, 12-14 and 16-18.

Claims 4, 7–10, 12–14 and 16-18 are rejected under 35 U.S.C. §102(b) as being anticipated by William. Appellants urge to the contrary.

This ground of rejection applies only to dependent claims, and is predicated on the validity of the rejection under 35 U.S.C. §102 given William as applied to claims 1 and 11 above.

As articulated above with respect to claims 1 and 11, there are missing claimed features not taught/suggested by the cited references – including "self reconfiguration." (emphasis added). – and thus, dependent claims 4, 7-10 and 12-14 and 16-18 have been erroneously rejected under 35 U.S.C. §102(b). The Examiner failed to establish a *prima facie* showing of anticipation.

Therefore, Appellants' claims 4, 7–10 and 12–14 and 16-18 are patentable under 35 U.S.C. §102(b) over William as applied to claims 1 and 11 above.

II. Rejection of claims 2-3 and 5-6 under 35 U.S.C. §103(a).

Claims 2, 3 and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over William in view of Stanwood. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over William in view of Barak. Appellants urge to the contrary.

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These grounds of rejection apply only to dependent claims and is predicated on the validity of the rejection under 35 U.S.C. §102 given William as applied to claim 1 above.

As articulated above with respect to claim 1, there are missing claimed features not taught/suggested by the cited references – including "self reconfiguration." (emphasis added). – and thus, dependent claims 2-3 and 6 have been erroneously rejected under 35 U.S.C. §103(a). The Examiner failed to establish a *prima facie* showing of obviousness.

Additionally, with respect to dependent claims 5 and 15, William does not teach or suggest at least:

"monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals,"

as recited in each of claims 5 and 15 (emphasis added). The Examiner suggests that such a feature is disclosed on page 5, lines 11 - 22 and 26 - 31 of William. Appellants respectfully disagree.

More specifically, the cited portion of William discloses existence of a mechanism for informing a base station controller about a failure on a base station or an RCU. The cited portion further discloses that the OMC can instruct a base station to increase power transmitted from respective RCUs and that power output may be limited to a range of transmission. However, the cited portion does not disclose the above recited feature of claims 5 and 15. In fact, the cited portion does not even mention a wireless terminal, much less monitoring such wireless terminal to determine direction of its travel. Accordingly, William does not teach or suggest all of the features of claims 5 and 15 arranged as in the claims.

Therefore, Appellants' claims 2-3 and 6 are patentable under 35 U.S.C. §103(a) over William in view of Stanwood and Appellants' claims 5 and 15 are patentable under 35 U.S.C. §103(a) over William in view of Barak.

III. Rejection of claims 19 and 20 under 35 U.S.C. §102(e).

Claims 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood et al., U.S. Publication No. 2006/0264214 (hereinafter, "Stanwood").

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A.1. Claim 19.

Claim 19 is rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood. Appellants urge to the contrary.

1. The Examiner failed to establish a prima facie showing of anticipation because Stanwood fails to teach exactly what is claimed.

According to MPEP §2131.03 (III) "Anticipation under §102 can be found only when the reference discloses exactly what is claimed and that where there are differences between the reference disclosure and the claim, the rejection must be based on §103 which takes differences into account. Furthermore, in order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." See MPEP §2131.03 (II). (emphasis added).

The Stanwood reference fails to disclose exactly what is claimed in Appellants' independent claim 19.

More specifically, as recited in independent claim 19, Stanwood does not teach or suggest at least:

"detecting, at a <u>first base station element</u>, that a failure condition occurred on a second base station element, wherein the <u>second base station element</u> was <u>serving a plurality of wireless terminals</u> prior to occurrence of the failure condition; and

reconfiguring ... the first base station element ..." (emphasis added).

Stanwood, in contrast, discloses a communication device that switches between operating as a subscriber station and a base station. When a base station fails or is removed from the wireless system notwithstanding the reason for such a removal, another subscriber station takes over functionality of the removed base station. However, if changing the functionality of the subscriber station is equated to reconfiguring of such a subscriber station (as suggested by the Examiner), the entity that is being reconfigured is a subscriber station and not an operating base station element, as claimed by Appellants (see Stanwood, paragraph [0023]). Therefore, Stanwood fails to disclose reconfiguring the first active base station element feature of claim 19.

Furthermore, with respect to claim 19, the configuration solution is based on at least a type of the failure condition. In Stanwood, on the other hand, how a particular subscriber station should be reconfigured is not based on a type of the failure condition.

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Rather, the device of Stanwood has two states of operation: (1) as a subscriber station and (2) as a base station. Further, when a particular base station cannot serve as such, another subscriber station becomes a base station, notwithstanding why that particular base station can no longer serve as the base station. Therefore, Stanwood fails to teach or suggest that the configuration solution is based on a type of the failure condition as required by claim 19.

2. Conclusion.

Appellants respectfully submit that there is no suggestion in William that would have resulted in Appellants' invention as provided in independent claim 19. Accordingly, independent claim 19 is not anticipated by William and is allowable under 35 U.S.C. §102.

A.2. Claim 20.

Claim 20 is rejected under 35 U.S.C. §102(e) as being anticipated by Stanwood. Appellants urge to the contrary.

As articulated above with respect to claim 19, Stanwood fails to teach exactly all elements of independent claim 20 as required under 35 U.S.C. §102 for establishing a *prima facie* showing of anticipation. Independent claim 20 recites at least some of the elements of independent claim 19 that are discussed above. Therefore, for at least the reasons discussed above, independent claim 20 also is patentable under 35 U.S.C. §102(e) over Stanwood.

Moreover, Stanwood is silent with respect to the feature of selecting the reconfiguration solution "from a plurality of pre-determined reconfiguration solutions associated with the first base station element," as recited in independent claim 20. As noted above, the only solution that Stanwood discloses is switching the functionality of a station from being a subscriber station to being a base station.

As such, Stanwood fails to disclose exactly all elements of claim 20. Therefore, independent claim 20 is not anticipated by Stanwood and is allowable under 35 U.S.C. §102.

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Conclusion

Thus, Appellants submit that all of the claims presently in the application are allowable.

For the reasons advanced above, Appellants respectfully urge that the rejection of claims 1-21 is improper. Reversal of the rejection of the Office Action is respectfully requested.

Respectfully submitted,

Dated: 3/8/10

Eamon J. Wall

Registration No. 39,414 Wall & Tong, L.L.P.

595 Shrewsbury Ave. Shrewsbury, NJ 07702

Telephone: (732) 842-8110 x120 Facsimile: (732) 842-8388

Attorney for Appellant(s)

CLAIMS APPENDIX

1. (previously presented) A method, comprising the steps of:

detecting a failure condition on a first base station element, wherein the first base station element was serving a plurality of wireless terminals prior to the occurrence of the failure condition; and

upon detecting the failure condition, triggering a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution depends on a type of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals.

- 2. (previously presented) The method of claim 1, further comprising:
- upon determining that the failure condition has been cleared on the first base station element, restoring an original configuration of the second base station element.
- 3. (previously presented) The method of claim 1, wherein the reconfiguration solution is pre-determined prior to the occurrence of the failure condition.
- 4. (previously presented) The method of claim 1, wherein the reconfiguration solution comprises:

increasing a power level employed by the second base station element for expanding a wireless coverage area of the second base station element.

5. (previously presented) The method of claim 1, wherein the reconfiguration solution comprises:

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monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals; and

establishing a connection with each of the plurality of wireless terminals for which the direction of travel is toward the second base station element by initiating respective signaling at the second base station element.

- 6. (original) The method of claim 1, wherein the failure condition is detected by the second base station element.
- 7. (original) The method of claim 1, wherein the failure condition is detected by the first base station element.
- 8. (previously presented) The method of claim 7, further comprising the step of: in response to detecting the failure condition, generating a failure indication message adapted to trigger the second base station element to self-reconfigure; and transmitting the failure indication message toward at least one of the second base station element and a base station controller.
- 9. (previously presented) The method of claim 8, wherein if the failure condition is associated with a wireless communication portion of the first base station element, the failure indication message is generated for transmission by a wireline portion of the first base station element.
- 10. (previously presented) The method of claim 8, wherein if the failure condition is associated with a wireline communication portion of the first base station element, the failure indication message is generated for transmission by a wireless portion of the first base station element.
- 11. (previously presented) An apparatus, comprising:

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means for detecting a failure condition on a first base station element, wherein the first base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

means for triggering, upon detecting the failure condition, a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition, wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal of the portion of the plurality of wireless terminals.

12. (previously presented) The apparatus of claim 11, wherein the means for triggering comprises:

means for determining the reconfiguration solution.

- 13. (previously presented) The apparatus of claim 11, further comprising:

 means for reconfiguring the second base station element according to the reconfiguration solution.
- 14. (original) The apparatus of claim 13, wherein the means for reconfiguring the second base station element comprises:

means for increasing a power level employed by the second base station element for expanding a wireless coverage area of the second base station element.

15. (original) The apparatus of claim 13, wherein the means for reconfiguring the second base station element comprises:

means for monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals; and

means for establishing a connection with each of the plurality of wireless terminals for which the direction of travel is toward the second base station element.

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- 16. (original) The apparatus of claim 11, wherein the failure condition is detected by the first base station element.
- 17. (previously presented) The apparatus of claim 16, further comprising:

means for generating, in response to detecting the failure condition, a failure indication message adapted to trigger the second base station element to self-reconfigure; and

means for transmitting the failure indication message toward at least one of the second base station element and a base station controller.

- 18. (previously presented) The apparatus of claim 17, wherein if the failure condition is associated with a wireless communication portion of the first base station element, the failure indication message is generated via a wireline portion of the first base station element.
- 19. (previously presented) A method, comprising the steps of:

detecting, at a first base station element, that a failure condition occurred on a second base station element, wherein the second base station element was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

reconfiguring, upon detecting the occurrence of the failure condition on the second base station element, the first base station element according to a reconfiguration solution determined based on at least a type of the failure condition, the reconfiguration solution adapted to reconfigure the first base station element to serve at least one of the plurality of wireless terminals previously served by the second base station element.

20. (previously presented) An apparatus, comprising:

a input-output module for detecting, at a first base station element, an occurrence of a failure condition on a second base station element that was serving a plurality of wireless terminals prior to occurrence of the failure condition; and

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a controller coupled to a receiver, the controller adapted to respond to the occurrence of the failure condition on the second base station element by triggering the first base station element to reconfigure itself according to a reconfiguration solution to serve at least a portion of the plurality of wireless terminals served by the second base station element prior to the occurrence of the failure condition, wherein the reconfiguration solution is selected from a plurality of pre-determined reconfiguration solutions associated with the first base station element.

21. (previously presented) An apparatus, comprising:

means for detecting an occurrence of a failure condition on a first base station element that was serving a plurality of wireless terminals prior to the occurrence of the failure condition;

means for determining a reconfiguration solution adapted to reconfigure at least one other base station element for serving at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the reconfiguration solution is based at least in part on a geographical location of the first base station element and a geographical location of the at least one other base station element; and

means for implementing the reconfiguration solution for reconfiguring the at least one other base station element to serve the at least a portion of the plurality of wireless terminals previously served by the first base station element, wherein the at least one other base station element is configured to initiate and establish, after being reconfigured, communications with wireless terminals in the at least a portion of the plurality of wireless terminals for providing continuity of the service to the wireless terminals previously provided by the first base station element to the wireless terminals.

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EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.

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11/354,709	02/15/2006 Abhaya Asthana		Asthana 10-17-10-4 (LCNT/	1276	
46363 WALL & TON	7590 06/14/201 G, LLP/	EXAMINER			
ALCATEL-LU	CENT USA INC.	AJIBADE AKONAI, OLUMIDE			
25 James Way Eatontown, NJ	07724	ART UNIT PAPER N			
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The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ABHAYA ASTHANA, ERIC BAUER, PETER BOSCH, and XUEMEI ZHANG

Application 11/354,709 Technology Center 2600

Before MARC S. HOFF, DAVID M. KOHUT, and LYNNE E. PETTIGREW, *Administrative Patent Judges*.

PETTIGREW, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from a non-final rejection of claims 1-21. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

STATEMENT OF THE CASE

Introduction

Appellants' invention relates to wireless communication networks. Spec. 1:5-6. More specifically, the invention relates to a method and apparatus for reconfiguring a first base station to attempt to serve at least a portion of the plurality of wireless terminals served by a second base station in response to detection of a failure condition at the second base station. Abstract.

Claims 1, 11, 19, 20, and 21 are independent. Claim 1 is illustrative of the invention (formatting modified and emphasis added):

1. A method, comprising the steps of:

detecting a failure condition on a first base station element, wherein the first base station element was serving a plurality of wireless terminals prior to the occurrence of the failure condition; and

upon detecting the failure condition, triggering a second base station element to self-reconfigure according to a reconfiguration solution adapted to reconfigure the second base station element to serve at least a portion of the plurality of wireless terminals served by the first base station element prior to the occurrence of the failure condition,

wherein the reconfiguration solution depends on a type of the failure condition,

wherein, to provide continuity of the service to the portion of the plurality of wireless terminals, the second base station element, upon completion of the self-reconfiguring, initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals.

Rejections on Appeal

The Examiner has rejected claims 1, 4, 7-14, 16-18, and 21 under 35 U.S.C. § 102(b) as being anticipated by William (GB 2280570 A, pub. Feb. 1, 1995). Ans. 3-8.

The Examiner has rejected claims 19 and 20 under 35 U.S.C. § 102(e) as being anticipated by Stanwood (US 2006/0264214 A1, pub. Nov. 23, 2006). Ans. 8-10.

The Examiner has rejected claims 2, 3, and 6 under 35 U.S.C. § 103(a) as being unpatentable over William and Stanwood. Ans. 11-13.

The Examiner has rejected claims 5 and 15 under 35 U.S.C. § 103(a) as being unpatentable over William and Barak (US 2004/0077349 A1, pub. Apr. 22, 2004). Ans. 13-14.

Issues on Appeal

Based on Appellants' arguments, the dispositive issues on appeal are:

- (1) Does William disclose a second base station element that "initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals" previously served by the first base station element, as recited in claim 1 and similarly recited in claims 11 and 21?
- (2) Does Stanwood disclose "reconfiguring . . . the first base station element" upon detection of a failure condition on a second base station element, as recited in claim 19 and similarly recited in claim 20?
- (3) Does Stanwood disclose "a reconfiguration solution determined based on at least a type of the failure condition," as recited in claim 19?

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(4) Does Stanwood disclose a reconfiguration solution "selected from a plurality of pre-determined reconfiguration solutions associated with the first base station element," as recited in claim 20?

ANALYSIS

Claims 1-18 and 21

In rejecting claim 1, the Examiner finds that William discloses a second base station element that "initiates respective signaling to establish communication with each wireless terminal in the portion of the plurality of wireless terminals" previously served by the first base station element. Ans. 4, 19. The portion of William cited by the Examiner provides that "transmitters in either adjacent sectors or cells can extend their coverage range beyond their normal boundaries in order to provide service to mobile communications devices lying outside their defined coverage cells." William, 7:30-33. According to the Examiner, "this clearly shows that signaling is initiated between the mobile communication devices and the base station 26 of the adjacent cell or sector in order to allow the mobile communication devices in the cell or sector of the base station to continue their wireless communication sessions." Ans. 19. Because the purpose of extending the range of base stations in adjacent cells is to maintain service with the mobile devices in the cell of the failed base station, the Examiner finds that "signaling between [sic] the second base station covering the cell/sector of the failed base station will and does occur to establish communication." Id.

We are unable to agree with the Examiner that William discloses the recited limitation, either explicitly or inherently. As Appellants argue,

William is "completely silent" with respect to a second base station initiating signaling to establish communication with wireless terminals previously served by the first base station. App. Br. 14. While William describes a second base station extending its communications coverage range, it does not disclose that the second base station initiates signaling to establish communication with the wireless terminals. Moreover, as Appellants point out, communication between the second base station and the wireless terminals could be established in other ways, e.g., the wireless terminals could initiate signaling to establish communication. App. Br. 14. Therefore, because the second base station in William does not necessarily initiate signaling to establish communication, William does not inherently disclose the recited limitation.

For these reasons, we do not sustain the Examiner's § 102(b) rejection of claim 1. Nor do we sustain the Examiner's § 102(b) rejection of independent claims 11 and 21, each of which recites a similar limitation, and dependent claims 4, 7-10, 12-14, and 16-18. Furthermore, the Examiner has not asserted that either Stanwood or Barak teaches or suggests the disputed limitation, and therefore we do not sustain the Examiner's § 103(a) rejection of dependent claims 2, 3, and 6 over William and Stanwood or the Examiner's § 103(a) rejection of dependent claims 5 and 15 over William and Barak.¹

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¹ Because this issue is dispositive with respect to claims 1-18 and 21, we need not address Appellants' additional arguments directed to those claims. *See* App. Br. 9-19; Reply Br. 2-6.

Claims 19 and 20

Appellants contend that Stanwood does not disclose "reconfiguring . . . the first base station element" upon detection of a failure condition on a second base station element, as recited in independent claim 19 and similarly recited in independent claim 20. App. Br. 19. Specifically, Appellants argue that "the entity that is being reconfigured [in Stanwood] is a subscriber station and not an operating base station element." *Id.* The Examiner responds that the subscriber station disclosed in Stanwood reads on the recited "first base station element" "because the subscriber station can also function as a base station, i.e., the subscriber station switches its mode to reconfigure its functionality from a subscriber to base station if it determines there is a failure of a base station." Ans. 22 (citing Stanwood, Figs. 2A and 2B, ¶¶ 23, 41, and 44).

Appellants have not persuaded us that the Examiner erred in finding that Stanwood discloses the disputed limitation. Stanwood describes a "switchable communication device" that can function as either a base station or a subscriber station. Stanwood, ¶¶ 20, 24. The Examiner has reasonably interpreted the recited "first base station element" to encompass Stanwood's device that switches its functionality to operate as a base station upon detection of a failure condition on another base station. Ans. 8-9, 22. Contrary to Appellants' argument, the claims do not require the first base station element to be "operating" as a base station before it is reconfigured.

Appellants also contend that Stanwood fails to disclose reconfiguring a first base station element "according to a reconfiguration solution determined based on at least a type of the failure condition" of the second base station element, as recited in claim 19. App. Br. 19-20. We agree with

the Examiner that Stanwood discloses this limitation. As the Examiner finds, Stanwood describes a reconfiguration solution (subscriber station 220 in Fig. 2B switches to base station mode) based on a type of the failure condition of the second base station (base station 200 stops functioning). Ans. 9, 22 (citing Stanwood, Figs. 2A and 2B, ¶¶ 23 and 41). As reasonably interpreted by the Examiner, a base station ceasing to function is a "type" of failure condition.

Appellants further contend that Stanwood fails to disclose a reconfiguration solution "selected from a plurality of pre-determined reconfiguration solutions associated with the first base station element," as recited in claim 20. App. Br. 21. Specifically, Appellants argue that "the only solution that Stanwood discloses is switching the functionality of a station from being a subscriber station to being a base station." *Id*.

We are not persuaded by Appellants' argument. As the Examiner correctly finds, Stanwood describes a plurality of pre-determined reconfiguration solutions. Ans. 10, 23. For example, in one such solution, the next base station (i.e., the next subscriber station to switch to base station mode) is selected by subscriber stations negotiating with one another using factors such as bandwidth or signal quality. Stanwood, ¶ 41. Another solution is a "next-in-line" plan based on various factors such as signal strength. *Id.* When one of these reconfiguration solutions results in the first base station being selected as the next base station, that solution is "associated with the first base station element." Thus, we agree with the Examiner that Stanwood discloses a reconfiguration solution "selected from a plurality of pre-determined reconfiguration solutions associated with the first base station element," as recited in claim 20.

For these reasons, we sustain the Examiner's § 102(e) rejection of claims 19 and 20.

DECISION

The Examiner's rejection of claims 1, 4, 7-14, 16-18, and 21 under 35 U.S.C. § 102(b) as being anticipated by William is reversed.

The Examiner's rejection of claims 2, 3, and 6 under 35 U.S.C.

§ 103(a) as being unpatentable over William and Stanwood is reversed.

The Examiner's rejection of claims 5 and 15 under 35 U.S.C. § 103(a) as being unpatentable over William and Barak is reversed.

The Examiner's rejection of claims 19 and 20 under 35 U.S.C. § 102(e) as being anticipated by Stanwood is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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Application Number	11/354,709	Filing Date	2006-02-15	Docket Number (if applicable)	Asthanaya 10-17-10-4	Art Unit	2641
First Named Inventor	Abhaya Asthana		,	Examiner Name	Ajibade Akonai, Olumide	•	
Request for C	This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV						
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Doc code: RCEX Case 6:20-cv-01021-ADA Document 35-2 Filed 09/02/21 Page 100 of 115 PTO/SB/30EFS (07-09)

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This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

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Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a
 court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement
 negotiations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a
 request involving an individual, to whom the record pertains, when the individual has requested assistance from the
 Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Serial No. 11/354,709

Page 1 of 7

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s):

Abhaya Asthana et al.

Filed:

02/15/2006

Serial No.:

11/354,709

Conf. No.:

1276

Examiner:

Ajibade Akonai, Olumide

Group Art Unit:

2641

Case:

Asthana 10-17-10-4 (LCNT/127809)

Title:

METHOD AND APPARATUS FOR IMPROVING WIRELESS

NETWORK RELIABILITY

MAIL STOP RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RCE SUBMISSION UNDER 37 C.F.R. 1.114

Dear Sir:

In connection with the Request for Continued Examination filed herewith, and in response to the Notice of Allowance mailed on August 19, 2013 and to the Examiner's Response to Amendment Under Rule 312 mailed on October 28, 2013, please reconsider the application as follows.

In the event that an extension of time is required for this response to be considered timely, and a petition therefor does not otherwise accompany this response, any necessary extension of time is hereby petitioned for.

The RCE filing fee is being submitted with the EFS web submission of Applicants' RCE and this 37 CFR 1.114 submission. In the event any further fees are due, the Commissioner is authorized to charge any fees due, including extension of time and excess claim fees, to counsel's Deposit Account No. 50-4802/ALU/127809.

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IN THE CLAIMS:

Please consider the claims as follows:

Claims 1-21 are cancelled.

22. (new) A method, comprising:

at a base station element, in response to an indication of a failure condition associated with another base station element serving a plurality of wireless terminals, performing a self-reconfiguration according to a reconfiguration solution;

said reconfiguration solution adapted to reconfigure the base station element to serve a portion of the plurality of wireless terminals, wherein the reconfiguration solution depends on a type of the failure condition;

at the base station element, upon completion of the self-reconfiguration, initiating communication with each of the portion of wireless terminals to provide thereby a respective continuity of service.

23. (new) The method of claim 22, further comprising:

at the base station element, upon determining that the failure condition has been cleared on the other base station element, restoring an original configuration of the base station element.

- 24. (new) The method of claim 22, wherein the reconfiguration solution is predetermined prior to the occurrence of the failure condition.
- 25. (new) The method of claim 22, wherein the reconfiguration solution includes increasing a power level employed by the base station element to thereby expand a wireless coverage area of the base station element.
- 26. (new) The method of claim 22, wherein the reconfiguration solution comprises: monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals; and

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selecting as said portion of the plurality of wireless terminals those wireless terminals for which the respective direction of travel is toward the base station element.

- 27. (new) The method of claim 22, wherein the failure condition at the other base station element is detected by the base station element.
- 28. (new) The method of claim 27, wherein the base station element detects a failure at the other base station element by detecting an interruption in data flow from the other base station element.
- 29. (new) The method of claim 22, wherein the indication of a failure condition is received from at least one of the other base station element and a base station controller.
- 30. (new) The method of claim 29, wherein a failure indication associated with a wireless communication portion of the other base station element is received by the base station controller via a wireline connection to the other base station element.
- 31. (new) The method of claim 29, wherein a failure indication associated with a wireline communication portion of the other base station element is received by the base station controller via a wireless connection to the other base station element.
- 32. (new) The method of claim 1, wherein the method is adapted for use at each of a plurality of base station elements within a network, each base station element being associated with at least one other base station element.
- 33. (new) The method of claim 1, wherein the indication of a failure condition is received at the base station element via a communication channel associated with one of the other base station element and a network management system.
- 34. (new) The method of claim 1, wherein said base station element is associated with a plurality of other base station elements, said method further comprising:

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at said base station, periodically polling said plurality of other base station elements to determine thereby whether a failure conditions exists.

35. (new) A base station element comprising a processor configured for:

at the base station element, in response to an indication of a failure condition associated with another base station element serving a plurality of wireless terminals, performing a self-reconfiguration according to a reconfiguration solution;

said reconfiguration solution adapted to reconfigure the base station element to serve a portion of the plurality of wireless terminals, wherein the reconfiguration solution depends on a type of the failure condition;

at the base station element, upon completion of the self-reconfiguration, initiating communication with each of the portion of wireless terminals to provide thereby a respective continuity of service.

- 36. (new) The base station element of claim 35, wherein the self-reconfiguration comprises increasing a power level employed by the base station element for expanding a wireless coverage area of the base station element.
- 37. (new) The base station element of claim 35, wherein the self-reconfiguration comprises:

monitoring each of the plurality of wireless terminals for determining a direction of travel associated with each of the plurality of wireless terminals; and

selecting as said portion of the plurality of wireless terminals those wireless terminals for which the respective direction of travel is toward the base station element.

38. (new) The base station element of claim 35, wherein the base station element detects a failure at the other base station element by detecting an interruption in data flow from the other base station element.

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- 39. (new) The base station element of claim 35, wherein the indication of a failure condition is received at the base station element via a communication channel associated with one of the other base station element and a network management system.
- 40. (new) A tangible and non-transient computer readable storage medium storing instructions which, when executed by a computer, adapt the operation of the computer to provide a method, comprising:

at a base station element, in response to an indication of a failure condition associated with another base station element serving a plurality of wireless terminals, performing a self-reconfiguration according to a reconfiguration solution;

said reconfiguration solution adapted to reconfigure the base station element to serve a portion of the plurality of wireless terminals, wherein the reconfiguration solution depends on a type of the failure condition;

at the base station element, upon completion of the self-reconfiguration, initiating communication with each of the portion of wireless terminals to provide thereby a respective continuity of service.

41. (new) A computer program product wherein computer instructions, when executed by a processor in a base station element, adapt the operation of the base station element to provide a method, comprising:

at a base station element, in response to an indication of a failure condition associated with another base station element serving a plurality of wireless terminals, performing a self-reconfiguration according to a reconfiguration solution;

said reconfiguration solution adapted to reconfigure the base station element to serve a portion of the plurality of wireless terminals, wherein the reconfiguration solution depends on a type of the failure condition;

at the base station element, upon completion of the self-reconfiguration, initiating communication with each of the portion of wireless terminals to provide thereby a respective continuity of service.

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REMARKS

In connection with the Request for Continued Examination filed herewith, and in response to the Notice of Allowance mailed on August 19, 2013 and the Examiner's Response to Amendment under Rule 312 mailed October 28, 2013, Applicants respectfully request entry of the claim amendments provided hereinabove. No new matter has been added.

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Conclusion

It is respectfully submitted that this application is in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

If, however, the Examiner still believes that there are unresolved issues, the Examiner is invited to call Eamon Wall at (732) 542-2280 x120 so that arrangements may be made to discuss and resolve any such issues.

Respectfully submitted,

Dated: 11/19/2013

/EJ Wall/

Eamon J. Wall Registration No. 39,414 Attorney for Applicants

WALL & TONG, LLP 25 James Way Eatontown, New Jersey 07724 Telephone: 732-542-2280

Facsimile: 732-542-2283

Case 6:20-cv-01021-ADA Document 35-2 Filed 09/02/21 Page 109 of 115



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

WALL & TONG, LLP/
ALCATEL-LUCENT USA INC.
25 James Way
Eatontown, NJ 07724

EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT PAPER NUMBER

2641

DATE MAILED: 03/04/2014

(LCNT/

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/354.709	02/15/2006	Abhaya Asthana	ASTHANA 10-17-10-4	1276

TITLE OF INVENTION: METHOD AND APPARATUS FOR IMPROVING WIRELESS NETWORK RELIABILITY

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	06/04/2014

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Case 6:20-cv-01021-ADA R Document 35-2 Filed 09/02/21 Page 110 of 115

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Certificate of Mailing or Transmission 46363 7590 03/04/2014 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. WALL & TONG, LLP/ ALCATEL-LUCENT USA INC. 25 James Way (Depositor's name Eatontown, NJ 07724 (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 11/354.709 02/15/2006 Abhava Asthana ASTHANA 10-17-10-4 1276 (LCNT/ TITLE OF INVENTION: METHOD AND APPARATUS FOR IMPROVING WIRELESS NETWORK RELIABILITY PUBLICATION FEE DUE APPLN. TYPE ENTITY STATUS ISSUE FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional UNDISCOUNTED \$960 \$960 06/04/2014 **EXAMINER** ART UNIT CLASS-SUBCLASS AJIBADE AKONAI, OLUMIDE 2641 455-420000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) The names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY) (A) NAME OF ASSIGNEE Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 📮 Corporation or other private group entity 🖵 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ Issue Fee A check is enclosed. ☐ Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any Advance Order - # of Copies overpayment, to Deposit Account Number 5. Change in Entity Status (from status indicated above) NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment. Applicant certifying micro entity status. See 37 CFR 1.29 ☐ Applicant asserting small entity status. See 37 CFR 1.27 \underline{NOTE} : If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status. ☐ Applicant changing to regular undiscounted fee status. NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable. NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications. Authorized Signature _ Date

Page 2 of 3

Typed or printed name _

Registration No. _

Case 6:20-cv-01021-ADA Document 35-2 Filed 09/02/21 Page 111 of 115



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
11/354,709	11/354,709 02/15/2006 Abhaya Asthana		ASTHANA 10-17-10-4 1276 (LCNT/		
46363 75	90 03/04/2014	EXAMINER			
WALL & TONG	, LLP/	AJIBADE AKONAI, OLUMIDE			
ALCATEL-LUCE	NT USA INC.				
25 James Way			ART UNIT	PAPER NUMBER	
Eatontown, NJ 077	24	2641			
			DATE MAILED: 03/04/201	4	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1468 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1468 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No. 11/354,709	Applicant(s) ASTHANA ET AL.		
Notice of Allowability	Examiner OLUMIDE T. AJIBADE AKONAI	Art Unit 2641	AIA (First Inventor to File) Status No	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (wherewith (or previously mailed), a Notice of Allowance (PTOL-85) of NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGORY of the Office or upon petition by the applicant. See 37 CFR 1.313	OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	lication. If not will be mailed	t included in due course. THIS	
 This communication is responsive to <u>RCE submitted 11/19/20</u> A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/a 				
 An election was made by the applicant in response to a restri requirement and election have been incorporated into this act 		ne interview on	ı; the restriction	
 The allowed claim(s) is/are <u>22-41</u>. As a result of the allowed of Highway program at a participating intellectual property office http://www.uspto.gov/patents/init_events/pph/index.jsp or sen 	e for the corresponding application.	For more infor		
4. Acknowledgment is made of a claim for foreign priority under	35 U.S.C. § 119(a)-(d) or (f).			
Certified copies: a) All b) Some *c) None of the: 1. Certified copies of the priority documents have I 2. Certified copies of the priority documents have I 3. Copies of the certified copies of the priority documents have I International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	been received in Application No		application from the	
Applicant has THREE MONTHS FROM THE "MAILING DATE" o noted below. Failure to timely comply will result in ABANDONME THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with	the requirements	
5. CORRECTED DRAWINGS (as "replacement sheets") must	be submitted.			
including changes required by the attached Examiner's Paper No./Mail Date				
Identifying indicia such as the application number (see 37 CFR 1.8 each sheet. Replacement sheet(s) should be labeled as such in the	34(c)) should be written on the drawing to header according to 37 CFR 1.121(d	gs in the front [.] l).	(not the back) of	
 DEPOSIT OF and/or INFORMATION about the deposit of Bloattached Examiner's comment regarding REQUIREMENT FOR 			the	
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 3. Examiner's Comment Regarding Requirement for Deposit of Biological Material 4. Interview Summary (PTO-413), Paper No./Mail Date	5.			

Application/Control Number: 11/354,709

Art Unit: 2641

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 32: On line 1, cancel "1" and replace with "22".

Claim 33: On line 1, cancel "1" and replace with "22".

Claim 34: On line 1, cancel "1" and replace with "22".

Allowable Subject Matter

2. Claims 22-41 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 22-41 are allowable in view of the decision on appeal rendered by the patent trial and appeal board on June 14, 2013.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OLUMIDE T AJIBADE AKONAI/ Primary Examiner, Art Unit 2641